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The Asian Banker Transaction Banking Awards 2018
Transaction Banker of the Year (International Bank) Nancy So, Head of Institutional Cash Sales and Client Management, Asia (May 2018)

Cash management

The 2018 Euromoney Cash Management Survey
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No. 5 Corporate cash management provider globally
No. 3 Financial institution cash management provider globally

The Asian Banker Transaction Awards
Best Global Clearing (USD and EUR) Bank
Best Euro Clearing Bank (May 2018)

The Bankers’ Choice Awards, The Asian Banker
Best Payment Portal in Asia Pacific
Best Cash Management Project in Asia Pacific (May 2018)

The Asset Triple A Treasury, Trade, Supply Chain and Risk Management Awards 2018
Best in Treasury & Working Capital – NBFIs
Best in Treasury & Working Capital – New Economy
Best Risk Management
Treasurer of the Year China: Fiona Zhang, Education First
Treasury Team of the Year: American Express India
10 Best Cash Management client solutions

Trade finance

The Asian Banker Transaction Banking Awards 2018
Best International Trade Finance Bank in Asia Pacific (May 2018)

EmiratesNBD Treasury Services Awards 2018
Best Trade Finance Services in Europe (July 2018)

The Asset Triple A Treasury, Trade, Supply Chain and Risk Management Awards 2018
Best Structured Trade Finance Bank
Best in Treasury & Working Capital – ECA financing
Best in Working Capital and Trade Finance, South Asia
Best Service Provider Structured Finance, China
Best Service Provider Trade Finance, India
Best Service Provider Supply Chain Finance, Malaysia
13 Best Trade Finance client solutions (April 2018)

The Banker Transaction Banking Awards 2018
US$60bn ECA-backed loans to finance Verizon purchases (US)

Securities Services

The Asset Triple A Islamic Finance Awards 2018
Best Islamic Custodian (June 2018)

The Asset Triple A Asset Servicing, Institutional Investor and Insurance Awards 2018
Best Fund Administrator – Retail Funds, India, Sri Lanka
Best Subcustodian, Indonesia, Philippines
Best Domestic Custodian, India, Malaysia, Philippines, Sri Lanka
Best Fund Administrator – Retail Mandate
Best Securities Lending Mandate
Custodian Banker of the Year (Australia) (June 2018)

The Banker Transaction Banking Awards 2018
Best Securities Services Bank (October 2018)

Trust and Agency Services

The Asset Triple A Asset Servicing, Institutional Investor and Insurance Awards 2018
Best Depositary Receipts Bank
Best Depositary Receipts Mandate
Best Corporate Trust Mandate – Corporates
Editor’s Triple Star for Transferable Custody Receipts
Custodian Banker of the Year (Australia) (June 2018)

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Welcome

Refreshingly different

May you live in interesting times – this old Chinese proverb is more relevant than ever when looking at today’s global market dynamics.

In the financial sector, new market entrants and technology platform providers now all compete for the industry’s large payment wallet, including its infrastructures.

What does this mean for the current ecosystem and how can banks that provide the current money movement rails, remain relevant?

The answer lies in what they are doing already – working together to create an outstanding customer experience. Not only do banks provide the rails, they also provide the trust that corporates and institutions value. This makes banks good partners for fintechs and platforms to gain their trust and together we can mirror personal banking convenience in the business to business environment.

One example of collaboration is SWIFT gpi, which present a tremendous opportunity to leverage existing infrastructure connecting the 10,000 banks on the SWIFT network.

This edition of flow provides a gpi progress update and demonstrates how transaction banking continues to support and enable the real economy – be it iron ore exports, healthcare supply chains or education.

At Deutsche Bank, we are working from the heart of the new ecosystem to bring something refreshingly different for everyone.

Everything is in flow – we hope that this also rings true also for the packed content in this new edition of our magazine.

Enjoy the read.

John Gibbons
Head of Global Transaction Banking

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For the very latest, follow us on Twitter @talkgtb
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MOVING SWIFTLY ON
An update on how SWIFT gpi is giving corporates multi-bank end-to-end payment visibility in real time

DASHBOARD DYNAMICS
Data analytics and robotic process automation are transforming post-trade processes and the securities services environment

RICH PICKINGS
Innovations in Australia’s trading and market framework is allowing investors to broaden their horizons and get exposure to top international stocks

BANCING ON PLATFORMS
Is regulation holding back or driving innovation in banking cloud technology?

THE OTHER 99%
11:FS’s Simon Taylor explains why there’s a long way to go before banking is fully digitalised

MUSIC TO ALL EARS
Deutsche Bank’s youth engagement programme has changed the lives of six disadvantaged children by supporting Hong Kong’s Metropolitan Youth Orchestra

LAST WORD
SWIFT’s Chief Platform Officer Stephen Gilderdale on how new technologies are helping improve the industry’s cybersecurity
Regional update
EMEA

Economic and political overview

Eurozone economic growth looks set at around +2.1%, a slight softening of momentum reflecting analysts’ view that earlier higher rates were “unsustainable”. Ongoing risks include a more disruptive trade war, proposals by the US to raise tariffs on EU car exports, and the Italian economy as 2019 budget discussions with the EU get underway in Q4 2018. Analysts have also noted that since 2008, European banks have raised more than €400bn of common equity tier 1 capital with CET1 ratios from globally systemically important banks (including Deutsche Bank) improving from around 10% at the end of 2013 to 13.1% in Q1 2018. “This offers scope for capital deployment or capital return.”

United Kingdom
Following the formal exit of the UK on 29 March 2019, there are ongoing discussions that Britain will remain part of the European single market for a transition period of 21 months until the end of 2020, hence the cross-border access of EU firms to the British market and of UK-based firms to the continental market will remain intact as today. However, analysts note that “it is not clear how the future relationship between the UK and the EU” as both parties are still negotiating, and that it “may well take until the literal last minute for an exit deal to be finally adopted.”

Germany
The German economy is “booming” with nominal GDP growth at 4%, note analysts (14 August) and this, together with high immigration has resulted in a property market boom and a scarcity of flats to rent. However, the country’s auto industry is grappling with the impact of US trade policy, Brexit and a cyclical slowdown in many car markets. Turning to the fintech sector, in 2017, Ministry of Finance research reveals that 75% of internet users in Germany used online banking services and 30% of them did not visit a bank branch at all. German fintechs are on the rise, with total fintech start-ups having reached 700 by the end of 2017. That year almost 90% of German banks reported that they were already cooperating with or planned to cooperate with fintechs.

Turkey
The Turkish lira and other assets are under unprecedented pressure due to an international crisis that has erupted between the US and Turkey regarding the ongoing detention of Pastor Brunson, which led to symbolic unilateral economic sanctions on Turkey by the US administration. Analysts observe that the Turkish economy is “still in dire need of macro adjustment, which requires a recognition of a higher proportion of NPLs in the system due to likely corporate restructuring following relentless currency weakening, a deep economic rebalancing requiring large fiscal and private saving, and a fully responsive central bank to fight against runaway inflation.”

OPEC/crude oil
Commodity analysts note that supply-demand balances will depend on the Organization of the Petroleum Exporting Countries (OPEC) output and the international response to a “renewed and more aggressive US sanctions programme against Iran” (13/15 OPEC countries are in the EMEA region). As at July 2018, they see “very little scope for OPEC or other non-OPEC countries outside the US to grow production and upgraded the year-end Brent crude target to US$80/bbl, with their 2019/20 forecast at US$76/68/bbl”.

Note: Past performance is not indicative of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis, which may prove to be incorrect

Sources
The House View (July 2018), Industry Banks Monitor, Brexit update: a roadmap for the autumn, German FinTechs on the rise, Turkey: what are the risks? Commodities Quarterly from Deutsche Bank Research and Global Markets (June to August 2018)
Trade finance
Ferrexpo, a Swiss-headquartered iron ore company with assets in Ukraine, has signed the increase and extension of its November 2017 revolving pre-export finance facility agreement with a syndicate of seven international banks. This August 2018 deal reflects an increased facility amount of US$400m (up from US$195m) and a four-year tenor (up from three years). Deutsche Bank’s Structured Commodity Trade Finance (SCTF) team along with BNPP arranged and led the syndication efforts as joint coordinating mandated lead arrangers (MLAs) and bookrunners. Pricing remained at LIBOR plus 450 bps.

Duferco Danish Steel, a reroller of billets and one of the leading merchant bar suppliers in Europe has upsized an existing borrowing base facility (BBF) to €32m, with Deutsche Bank’s SCTF team as coordinating mandated lead arranger and sole bookrunner. Increased steel prices and working capital needs prompted the refinancing and the extension was closed in July 2018 for an additional 3.5 years. Deutsche Bank maintains its role as facility agent and security agent.

In July 2018, Deutsche Bank closed the accordion of Trafigura’s refined metals borrowing base facility (RMBB) at a record US$2.47bn, supported by a 23-bank syndicate. Deutsche Bank acted as MLA and agent and coordinated the successful raising of US$250m additional financing under the accordion mechanism. First implemented in 2010 at US$1.02bn, the facility has grown substantially in size. The RMBB is structured as a one-year uncommitted facility secured by refined metals such as copper, aluminium, lead, zinc, nickel and precious metals and related trade receivables. Inventory is located in over 35 countries around the world.

Uralkali, one of the world’s largest potash producers, signed a US$825m five-year pre-export facility on 29 June 2018 with a syndicate of 11 international banks, including Deutsche Bank SCTF acting as arranger. The facility is priced at LIBOR plus 190 bps and is used for refinancing the company’s existing loans and general corporate purposes.

Launched in June 2018, the new platform dbDistribute makes it possible to structure and book deals for clients engaging multiple banks in risk syndication. The platform has a fully transparent monitoring facility and provides a level of transactional granularity and speed to investors that had not been possible before, along with more control for transaction selection. Kirsten Kunz, Head of Trade Finance Product Management, said: “This will facilitate an efficient end-to-end process when making de-risking decision with respect to the underlying transaction, as well as tracking adherence to regulatory requirements.”

Cash management
Deutsche Bank’s cross-border payments solution FX4Cash is celebrating its 10th anniversary. The Bank’s joint venture between Global Foreign Exchange and Global Transaction Banking (GTB) reaches across its network and client base in more than 125 countries. “Starting with an initial capability of seeing a live rate, FX4Cash now offers a slew of cross currency payment solutions to challenges faced by our clients across the globe.” says Jeff Smeeton, EMEA GTB FX Head at Deutsche Bank. With STP at the core of each service offered, FX4Cash now processes more than 200,000 transactions every month.

DB people
Oliver Funck was appointed regional Head for Global Transaction Banking in the Middle East and Africa on 1 August 2018. Based in Dubai, he also heads Deutsche Bank’s Trade Finance for Financial Institutions product franchise.

James Cox became EMEA Head of Securities Services in July 2017 having held a number of leadership positions within Deutsche Bank, most recently as Chief Operating Officer for Securities Services.
Regional update
Asia Pacific

Economic and political overview

Asia’s growth “remained above potential” in Q2, note analysts, as “exports rebound”. Depreciation of local currencies is likely to enable those economies with account surpluses to pursue monetary policy normalisation, as weaker FX acts as an automatic stabiliser to tariff shocks for exporters, at the expense of importers and price stability.

China
After supporting growth in the first part of 2018, fiscal policy, say analysts, has softened and economic growth is anticipated to hover at around 6.6% this year. “Monetary policy is likely to be deployed further to support growth, which will naturally result in a weaker currency due to interest differentials. The yuan will weaken further this year and in 2019.” They raise concerns that the outlook regarding trade conflict with the US has deteriorated. On 2 August, the US announced that it may impose a 25% tariff rather than 10% on US$200bn of Chinese goods. The next day, China announced retaliation measures to impose a 5% to 25% on US$60bn of US goods. “The escalation of the trade war will likely put more pressure on China’s current account surplus and subsequently make the won more susceptible to volatility in overseas portfolio investments, including possibly weakening it.”

Philippines
The Bangko Sentral ng Pilipinas (BSP) raised interest rates by 50bps to 4% having already raised rates in May and June 2018 to combat inflation. Core inflation is expected to remain above 4% until mid-2019. Analysts state that the economy is in danger of overheating. “Demand growth is faster than the economy’s ability to supply goods and services and so prices are rising more quickly even as more goods get sucked into the economy from abroad – the trade deficit is rising by US$1.3bn per month compared to last year as a result. Rice prices (9.6% of the CPI) are rising at their fastest pace in more than three years despite the National Food Authority having essentially depleted all its reserves. “While crude oil prices are rising at about a 50% year-on-year pace, the ease with which firms appear able to pass on these higher prices to customers is testament to the strength of demand.”

India
India is a favoured investment destination given its positive population dynamic, aspirational middle class population and reforms push for increased formalisation, transparency and digitalisation. However, note analysts, “There exists a large degree of heterogeneity among India’s key states, which needs to be taken into consideration before making investment decisions.” Using a World Bank and Government of India report, analysts examined 16 key states in terms of 12 broad parameters (such as poverty rate, urbanisation rate, state debt, tax revenue, ease of doing business), identifying the top three as Gujurat, Maharashtra and Tamil Nadu.

Note: Past performance is not indicative of future returns. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis, which may prove to be incorrect

Sources
Regional Deutsche Bank highlights

Trade finance
Closed on 19 April 2018, Deutsche Bank’s Structured Trade and Export Finance (STEF) team partnered with ING to coordinate and arrange an export credit agency-backed buyer credit of US$66m to finance a part of the incurred construction costs for a gas processing plant at the Kandym field in the Republic of Uzbekistan. The Korea Trade Insurance Corporation (KSURE) acted as guarantor insurer with goods from Hyundai Engineering being exported from Korea to Uzbekistan. The Corporate Trust Hong Kong team is the facility agent.

Deutsche Bank (STEF) was one of 18 lenders to the Canakkale Highway and Bridge Construction consortium that raised €2.265bn (US$2.8bn) of partially ECA-backed 15-year debt to finance the Canakkale 1915 Bridge PPP project in Turkey (a toll bridge). Signed in March 2018, the deal was oversubscribed and finished on €1.582bn of commitments from foreign lenders (including a €300m Islamic tranche) and €683m of uncovered debt from Turkish banks.

The memorandum of understanding (MoU) between Sinosure and Deutsche Bank is yielding results, underpinning a US$50m facility for the cross-border financing of a cement project on behalf of a Chinese company’s Kazakh subsidiary. Currently, there are three deals live under the Sinosure MoU, amounting to total of more than US$650m.

Cash management
US-based Flywire Payments has mandated Deutsche Bank in India to collect tuition fees from Indian students who study at international universities. Flywire will enable these students to pay their tuition fees locally in India, thus preventing possible delays for funds to reach the university. Flywire then pays the universities (e.g. in the US and the UK) and provides them with additional remittance details. Students can make payments on a real-time basis, while universities will be able to better and faster reconcile collections from India.

Trust and agency services
Deutsche Bank Singapore’s Corporate Trust team were mandated on Bayfront Infrastructure Pte collateralised loan obligation backed by project finance borrowings. The US$458m securitised loan portfolio consisted of 37 project finance loans in respective 30 projects located in the Asia Pacific and Middle East regions. Bayfront issued four classes of notes, rated by Moody’s with Class A being assigned a preliminary rating of Aaa (sf). The issuance was sponsored by Clifford Capital Pte Ltd. The Corporate Trust team were responsible for providing the key role of transaction administrator, which included the functions of portfolio administration, waterfall calculations and investor reporting.

Technology
Deutsche Bank acquired Quantiguous Solutions in May 2018. This is a Mumbai-based software company that specialises in turnkey solutions for machine-to-machine interventions via APIs and human-to-machine interactions on mobile devices. The deal is set to help the bank develop its open banking platform to connect corporate clients, fintechs and partner companies.

DB people
Hans-Dieter Holtzmann was appointed Chief Country Officer and GTB Head for Deutsche Bank’s franchise in Vietnam from August 2016. Having been with the bank for more than 20 years, he has worked in various senior capacities across global offices, including most recently as Head of Public Sector for Germany where he was responsible for covering clients at the federal, state and municipality level.

David Lynne assumes the role of Chief Country Officer for Singapore in addition to his responsibilities as APAC Head of Fixed Income and Currencies and Global Transaction Banking.
Regional update

Americas

Economic and political overview

With the US economic story being one of strong growth with possible risks of overheating, not to mention the spectre of trade wars, the LatAm economic outlook is, note analysts, dim and diverse. Politics and policy orientation are at the core of stress in Argentina, Brazil and Venezuela, while the Andean region (Chile, Colombia and Peru) is “improving”.

United States

Growth is set to accelerate in 2018 to an annual pace of +2.9%, boosted by the combination of tax cuts and increased government spending. Analysts note that the period of US outperformance in Q2 2018 has been attributable to the lagged effect of the weaker dollar. “Given the recent dollar strength, it is likely that the US will decelerate relative to partners. Economic momentum remains very strong,” they add. However, the wage and price data supports expectations to “upside surprise to inflation” – labour markets have tightened with little slack remaining. According to the Federal Open Market Committee (FOMC) statement of 1 August 2018, the strategy is to maintain the target range for the federal funds at 1.75% to 2%. A total of four hikes are expected in 2018 and 2019.

The proposed protectionist trade measures has, note analysts, the potential to “significantly hurt global growth”. Trade war tensions are expected to rise further “as the US is unlikely to back down”. Rhetoric has intensified, particularly between the US and China, while EU leaders have been exploring talks to avoid escalation (see China section on page 8).

Brazil

With ex-President Lula da Silva no longer on the ballot, the key to the 7 October 2018 election will be the first round’s runner-up. Far-right candidate Jair Bolsonaro’s lead in the first round polls has strengthened since being attacked on 6 September. But second round scenarios show Bolsonaro either tied or marginally behind the four candidates who according to polls are in a virtual tie for second place: Gerardo Alckmin, Ciro Gomes, Fernando Haddad, and Marina Silva. In spite of the political uncertainty, around US$30bn has flowed into Brazil via its FX market – making 2018 so far having brought more of the greenbacks into Brazil than any other year in the past decade, apart from 2011.

Colombia

After taking office in April 2018, President Martin Vizcarra is facing the same governance challenges of his predecessors: balancing public finances in the face of social pressure. However, rising mining royalties, the recovery in economic activity and proceeds from a tax amnesty on capital repatriation have supported compliance with short-term fiscal deficit targets. But, say analysts, “the need to raise permanent revenue and exert tighter restraint on current expenditure should become more binding as cyclical tailwinds form global growth and commodity prices dissipate”. According to the IMF, Colombia’s mineral fuels exports (including oil) for 2017 at US$20.4bn were 54% of total exports.

Mexico

Following his victory in the July 2018 presidential election, Andrés Manuel López Obrador (AMLO) has announced an ambitious economic and infrastructure investment agenda, such as the construction of 300 rural roads, internet provision across Mexico and a transoceanic corridor, funded by a “reorganisation of public spending”. Some 107 existing oil contracts between the former Mexican government and private companies worth more than US$160bn are being revised and new auctions suspended. But beyond government spending, analysts do not expect a rebound of growth in Mexico “as private investment is likely to remain in the side lines until NAFTA is on a more solid footing”.

Sources

The House View (July 2018) Brazil: This is just the beginning, Macro Notes, Emerging Markets Monthly from Deutsche Bank Research and Global Markets (June to August 2018 with an update on Brazil from September 2018)
Trade finance
In June 2018, Deutsche Bank’s Latin America Trade Risk Sales (TRS) team closed a US$52m post-import finance facility with Argentina’s vertically integrated national energy company, YPF SA (YPF). Operations include the exploration and production, and the transport, refining and marketing of gas and petroleum products. This trade finance solution provides liquidity and working capital support.

Cash management
Deutsche Bank announced the introduction of a digital signature solution leveraging DocuSign in July 2018. It was piloted with Honeywell, the US headquartered home and building technology/aerospace corporate. Digitalising account openings and document signings reduces costs and processing time. “This solution is a nice and obvious fix to the otherwise cumbersome collection of wet signatures,” said Marie-Astrid Dubois, Assistant Treasurer EMEA and Asia at Honeywell.

ModoPayments LLC (Modo), an industry leader in digital payments innovation is set to help Deutsche Bank expand its digital B2B and B2C payments business following the bank’s equity stake acquisition in the US-based provider. Announced in August 2018, the partnership will facilitate payments into non-bank platforms such as Alipay, PayPal, M-Pesa and WeChat beyond traditional banking channels. “This partnership with Deutsche Bank is a great opportunity to work with one of the world’s largest payment providers that can implement our technology on a global scale and further our reason for being,” said Bruce Parker, founder and CEO at Modo.

Trust and agency services
Deutsche Bank successfully completed the CAD$270m senior debt facility for Grasshopper Solar. The Canadian solar energy company will use the debt to further expand its operations, which are focussed on the acquisition, development, engineering, procurement and construction and long-term ownership of solar projects. It will also explore new opportunities and expand its asset base. Deutsche Bank acted as lead arranger, lender, administrative agent and collateral agent, placing it in a strategic position to streamline both the financing and administration of this deal.

Puxin, an after-school education service provider headquartered in Beijing, has appointed Deutsche Bank as depositary bank for its New York Stock Exchange-listed American Depositary Receipt programme. Puxin has a network of 397 learning centres across 35 cities in China, with over 8,000 employees. It offers education programmes not only in the classroom but also through online and mobile applications.

DB people
Juan Martin has been appointed Regional Head of Trade Finance Americas, and Giovanni Saladino Head of Trade Finance Flow Americas in May 2018. Both are based in New York.

Susan Levitt has joined the Trust & Agency Services (TAS) Americas team as Head of Sales, Americas from Kroll Bond Ratings, where she was most recently Head of Business Development.
Shape of a nation

As Sibos returns to Sydney for its 40th birthday, flow reflects on how an economy once based on sheep farming and wheat has delivered sustained growth and led the way in financial services innovation.

When a group of 320 Santa Clauses on Bondi Beach paddled their way into the Guinness Book of Records for the world’s largest surfing lesson on 20 December 2015, this should have been no surprise. Australians do things big.

Celebrations afterwards no doubt included a few beers and something on the ‘barbie’. While sunshine and all that space have done much to contribute to a spirit of ‘G’day mate’ cheerfulness, it is the country’s comparative economic and political stability, sound regulatory framework, abundant natural resources, infrastructure and deep talent pool that have positioned it so well to gain from the liberalisation of the Asian market.

It seems fitting therefore, at a time when global financial services are on the brink of quite radical transformation (particularly in the payments space), that Sibos returns to Sydney for the third time – and for its 40th birthday. This article provides an overview of the host nation as a precursor to our cover story on National Australia Bank (see p16), from the perspective of a European bank that supports its multinational corporate clients in Australia. They come to Australia because it is a similar market to continental Europe and tends to have large operations focused in the growth sectors: resources, energy, mining, food, fibre and agriculture, financial services, education, tourism, and advanced manufacturing.

Rock-solid growth
With US$19.9trn of natural resources (it meets 14.3% of the world’s demand for gold), Australia comes eighth on a table dominated by Russia (US$75trn), and, despite being around 80% of the size of the US, with a population of 24.8 million, it has far fewer people to feed than America’s 325 million.

Australia’s output during the 19th century was dependent on primary production, with very little manufacturing. “Agriculture (predominantly wheat and wool) accounted for one-third of output, and the share of mining surged dramatically during the booms in the 1850s and late in the century”. By the 1950s manufacturing was firmly established, with its share of total employment having grown to 25%.

The country is, says Deutsche Bank’s Global Head of Structured Commodity Trade Finance, John MacNamara, “a huge exporter of commodities”. He explains that the sector represents nearly half of all Australian exports and around 80% of export value growth year-on-year. “This is very significant in global terms and Australian commodity production and exports just get stronger all the time,” he says. “Iron ore exports alone were A$63bn in 2017,...
and to stand on the docks at Port Hedland watching not one but six 250,000-tonne bulk iron ore carriers loading for China and Japan feels very much like looking down the throat of the real economy, but Australia also has very strong flows on soft commodities and fuels,” reflects MacNamara.

Mining giants BHP, Rio Tinto, Altura, Glencore and Barrick Gold are all highly sophisticated global operations using state-of-the-art technology to add as much value as possible to the extracted raw commodities. These companies make a fundamental contribution to Australia’s economy (see Key facts: Australia). “The way commodity production and export is practised in Australia is also a key indicator for the global commodities sector – it’s all very high tech. If you want to see the future of global commodity production, then go do a few site visits in Australia,” concludes MacNamara.

A particularly interesting aspect of the Australian energy sector is lithium mining, given it is the world’s top producer. Capacity and expertise developed to mine coal are now being redeployed. As the popularity of solar power, electric cars and portable electric tools expands, so does the demand for lithium. Around 40 Australian corporates work in the lithium sector, a number of which are mining giants more known for their coal and iron ore, such as Altura – now re-positioned as a lithium miner. Altura launched its Pilgangoora Lithium project in March 2017, and lined up two binding offtake agreements with Chinese energy corporates Shaanxi HR Optimum Energy Co and Lion Energy Limited to the tune of 1,000,000 tonnes of 6% lithium oxide concentrate for a period of five years.

This bedrock of resources put the country in a strong position to withstand economic shocks such as the 1997 Asian financial crisis and the 2008 global financial crisis that rocked other regions, thanks to budget surpluses and the elimination of net debt (see Figure 1). By the first quarter of 2018, Australia had posted the strongest annual economic expansion in nearly two years, extending a 27-year run of recession-free growth.

### Shifting trade patterns

Australia’s goods and services exports account for around 20% of GDP and it has always had a large export sector.

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**Figure 2: Australia’s exports as percent of GDP**

- **Exports – goods**
- **Exports – goods and services**

Source: DFAT
In Figure 2 (see page 13), the Australian Government’s Department for Foreign Affairs and Trade (DFAT) shows how, “after the Korean War boom both ratios declined as Australian Government policy concentrated on promoting domestic industry. Since the deregulation of the Australian economy in the 1980s, both ratios have trended upwards, to around 20% by 2014–15.”

Through the 1960s, export growth was fuelled by the post-war commodities boom and a reduction of trade barriers following four post-war negotiating rounds on the General Agreement on Tariffs and Trade, notes the DFAT.

The other big change over the period is the shifting of trade corridors. During the 1960s, the majority of Australia’s trade took place with Europe and North America, but now both export markets and import sources have shifted towards Asia, which now accounts for more than 60% of Australia’s two-way goods and services trade – China being by far its dominant trading partner at A$155bn.

Special relationship
The China-Australia Free Trade Agreement (ChAFTA) entered into force on 20 December 2015. Australia’s Minister for Trade and Investment, Andrew Robb, signatory to ChAFTA, said at the time, “This historic agreement with our biggest trading partner will support future economic growth, job creation and higher living standards through increased goods and services trade, and investment. China, with its population of 1.4 billion people and rapidly rising middle class, presents enormous opportunities for Australian businesses well into the future.”

As China’s urbanisation, ramp-up of manufacturing, and investment in infrastructure resulted in high demand for Australian thermal coal and iron ore, Australia enjoyed healthy trade surpluses. Yet now that Chinese demand is shifting away from raw materials (the demand for lithium is not replacing iron ore and coal revenues) as it moves from a consumption-driven economy to more complex goods and services, Australia needs a wider pool of trading partners. In this case, the resource sector provides a unique advantage. “Few other countries had Australia’s huge supplies of iron ore, which were close to the sea and easily developed, and proximity to China for shipping minerals (of which transport costs are up to 10% of the value). But many developed countries have the education and technical expertise to meet China’s new demands,” noted Dr Anne Holmes from the Parliament of Australia in 2010.

Financial services
Quite aside from its merchandise exports, Australia has earned its place as a world-class participant in global investment markets. For in-bound investors, its stable regulatory framework and long-term economic growth make it an attractive destination to deploy capital. Australian MNCs, unlike some of their “greenfield” Asian neighbours, are mature and cash rich/cash generative, with net earnings repatriated monthly.

Despite having a relatively small population, Australia has some of the deepest and most liquid markets in the world. It is the fourth largest pension fund market with US$1.6trn (and No. 1 within Asia), and the Australian dollar is the fifth most traded currency.
“It’s a pivotal time for the country’s financial services sector, which is being shaped by new realities. Australia’s payments and securities market infrastructures are being revamped to meet the needs of a 24/7 digital economy. Banks are building exciting new products and services for their customers,” comments SWIFT on this year’s host country. So how has it stepped up to hub status?

Australian financial services regulation is split between the Reserve Bank of Australia, the Australian Securities and Investments Commission (ASIC) and the Australian Prudential Regulatory Authority (APRA). The country’s banking market is relatively concentrated by international standards, so when APRA announced heightened capital requirements in 2017, the ‘Big Four’ (Westpac, National Australia Bank, Commonwealth Bank of Australia and Australia and New Zealand Banking Group) bore the brunt of these requirements, and became even stronger.10

New landscape

However, in 2017, the banking competitive landscape – in line with other parts of the world, such as the European Union with its second Payment Services Directive – was turned on its head when the Australian government opened consultation on the best approach for implementing an open banking framework.

The ensuing “Review into Open Banking: giving customers choice, convenience and confidence” was published in December 2017, setting out how the principles of customer focus, competition, opportunity creation and fairness will be implemented.11 Implementation is devolved to the Australian Competition and Consumer Commission (ACCC) and the Office of the Australian Information Commissioner.

At the same time, the government is providing a lighter touch regulatory environment for Australia’s 600 fintechs. Known as ‘sandboxing’, this is to allow additional flexibility while they are still at the stage of testing their ideas. First launched in December 2016, draft legislation is underway to make the scheme more attractive to fintech start-ups.12

According to the Scottish Pacific SME Growth Index, Australia’s 2.1 million SMEs are turning to fintechs for working capital solutions rather than banks. As banks focus on their digital agendas to avert disintermediation, they are prioritising strategic partnerships with fintechs. Tim Dring, EY Oceania Banking and Capital Markets Leader, told Business Insider, “Australian banks have already made significant progress in this space and we are already seeing them make significant advancements in areas such as mobile payments platforms, fraud protection, biometric authentication and the use of robotic process automation.”13

New Payments Platform (NPP)

On 14 February 2017, SWIFT announced how, in response to the global regulatory drive for real-time payments, it had created the system that underpins the infrastructure of Australia’s forthcoming New Payments Platform (NPP) using ISO 20022 standards.

“For the first time ever, Australians will be able to make payments between individual or institutional accounts 24/7, and businesses will no longer need to wait several days to receive funds. This ‘always on’ capability will drive the weekend economy and reduce dependency on cash and cheques,” said NPP CEO Adrian Lovney at the time. See page 18 for further information about NPP.

Twelve months later, NPP went live, with SWIFT stating in a press release that NPP is “a key component within SWIFT’s broader global instant payments strategy”, Alain Raes, CEO of SWIFT EMEA & APAC, said that the roll-out and the enablement of real-time payments “is the most significant development in the Australian payments industry in decades and could have a more revolutionary impact on the economy than any previous payments system innovation”.

And this is just for starters…

Sources
1 See https://bit.ly/1oOLhTw at abs.gov.au
3 See https://bit.ly/2KmGgSp at alturamining.com
4 Altura Mining’s 2017 Annual Report can be read at https://bit.ly/2LkqWon
5 See https://reut.rs/2OAfsfn at reuters.com
7 See https://bit.ly/10mLj5p at austrade.gov.au
8 See https://bit.ly/1NPedrO at aph.gov.au
9 See https://bit.ly/2tPW78X at static.treasuring.gov.au
11 See https://reut.rs/2OAsfnn at reuters.com
13 See https://bit.ly/2LKqWon

Key facts

Australia

- GDP: US$1,339.1bn
- GDP growth: 2.3%
- Public debt % of GDP: 43%
- Population: 23.8 million
- Form of state: Federal Parliamentary Democracy (Commonwealth)
- Largest trading partner: China (32% exports, 23% imports)
- Largest exports: Metalliferrous ores; coal; coke; gas; gold; meat
- Largest import: Road vehicles; petroleum; industry machinery; telecommunications; electrical machinery
- Strengths: Large natural resource endowments; strong infrastructure and business environment; proximity to emerging Asia; low public debt; top tourist destination
- Weaknesses: Dependence on Chinese demand and commodity prices; high household debt (more than 180% of disposable income)

Source
Euler Hermes (June 2017)
No cash... no worries

A technology revolution and modernisation of the payments infrastructure have made Australia the boilerplate for a real-time, cashless society. *flow’s* Janet Du Chenne speaks to NAB’s Rachel Slade about the bank’s own transformation as part of a payments landscape overhaul, both domestically and cross-border, and how this is creating new services for both consumers and institutions.
When Australia’s four dominant banks came together to orchestrate the transformation of the payments industry the feat was nothing short of extraordinary. However, such an event would not be possible without its main protagonists. Among them is National Australia Bank’s Rachel Slade, whose career ambitions to make payments faster and more efficient for Australians were fulfilled this year with the launch of the New Payments Platform.

These ambitions were fuelled by several experiences throughout her career. Starting with one of her first client engagements at Andersen Consulting, now Accenture, she found her vocation to help transform payments in Australia.

Seconded to a bank to develop a request-for-proposal for a trade finance platform, she saw that transaction services were ripe for transformation and she wanted to be part of it. “I spent months in the back office – where they housed both trade and payments – drowning in paper,” she recalls. “This was in the late 1990s, but still I was so overwhelmed by the waste and inefficiency and ultimately the substandard customer experience.”

It is said that people with a passion for learning how things work and then trying to make them work better often make the best bankers. In an industry that is no stranger to process, Slade is a force to be reckoned with.

With an engineer’s mindset, she exudes a step-by-step approach to process efficiency and a desire to make things more efficient for customers. Since her first client engagements, she has become focused on giving customers an experience that is on a par with or better than what they are used to in the other parts of their lives.

It was during these engagements that Slade started to “appreciate the truly profound role banks play in helping people, individuals and businesses to fulfil their ambitions, while underpinning the functioning of the economy and its growth.” This appreciation led her to develop strategies that drive business transformation in banks as a consultant, and subsequently led her to Westpac Bank as Head of Transaction Services and then to National Australia Bank (NAB), where she leads the Deposits and Transaction Services division.

While at Westpac, one of these strategies involved simplifying the on-boarding and activation process for corporate customers who had a large number of card holders. The implementation teams and the customers here were also drowning in paper. She did not realise how bad the situation was until two colleagues joined a leadership team meeting with boxes and stacks of paper and piled them on the table in front of her. Sitting at a table, this stack of documents almost reached eye level. “I had to stretch to peer over it,” remembers Slade. “This was everything we sent to and received from a single customer. I was astounded”. Slade and her team agreed to take a “how can we?” approach with the risk, legal, product and compliance teams to cut the amount of information down into six pages, to fit in an envelope, and make things better for the customer. That was the first step. In the second step, the information was digitised.

In developing these business transformation strategies, both at Westpac and at NAB, she has always been in front of clients, engaging with them first hand to understand what they are trying to get done in their business as well as where they are currently seeing pain and friction with the bank. At NAB she engages with retail all the way through to corporate and institutional customers.

“My favourite solutions are the ones that I’ve co-designed with customers,” she says. “I often say to my teams that transactional banking is never about the product. It’s about really understanding what the customer is trying to get done and what the challenges are in their business. Our job is then to work with them to unlock value in their business and for their customers.”

She also spends a lot of time with start-ups, as an investment committee member of NAB Ventures, the bank’s venture fund, to see how the bank can get services into the hands of their customers faster. “One of the mantras I have developed a bit of a reputation for is ‘hurry up,’ “ she says proudly. “It’s really about a mindset that puts us in a frame where we are ready to compete with fintech, with big tech and with our traditional competitors.” She explains that customers’ expectations are continuing to ramp up as they experience relevant, personalised, data-driven offers and outcomes in the other parts of their lives. “We need to continually innovate to match this in their financial services experiences – they need to be easy, personal and supportive.”

She says the most amazing thing she has seen in her career is how technology has evolved to the point where everything is possible. “The challenge now is one of ‘just because you can, doesn’t mean you should’ – not everything is a hammer looking for a nail,” she cautions.

This better understanding of the customer experience using the right mix of technology is central to NAB’s digital transformation. And it is for this reason that Slade
was promoted to her latest role of Chief Customer Experience Officer at the bank. It began a few years ago with an approach called ‘customer journeys’. This involves “putting together true cross-functional teams that are focused on understanding the current experience of our customers, of our bankers and of our underlying process,” explains Slade. “They see where the pain and friction is, and systematically go about addressing it through change – the change could be policy-, process- or technology-enabled. At the same time, they are reimagining the whole experience and designing a ‘preferred reality’.”

Two of NAB’s most mature journeys are focused on everyday transaction banking,\(^1\) where the bank has made it easier to open a business account, and everyday business transaction banking,\(^2\) where it has introduced improvements to international payment fees. “We’ve delivered dozens of changes that mean we can now welcome a new customer and have them active in minutes, not days. And our customers are rewarding us with an average NPS uplift of +25 points,” says Slade.

With accountability for all payments, Slade talks with pride about what NAB has done to reposition its cross-border payments offering and a customer base defined by superfast adopters, this alone provides a fertile environment for innovation.

But the real catalyst was a review of the payments system by the Reserve Bank of Australia (RBA)\(^3\) in 2012, which concluded that increased innovation was required. RBA challenged the market to deliver near real-time payments and richer, ISO 20022-enabled remittance data flowing with the payment to enable straight through processing and simpler payments addressing.

Australia’s self-regulated community of banks, fintechs and the clearing house responded with significant modernisation of the payments market infrastructure for low- and high-value payments. In February

### Structure of NPP Australia

- **Basic infrastructure**: A 24/7, 365 days of the year network connecting the participants, a switch to move messages between them on the network, and an addressing service that enables transaction accounts to be identified by a simpler payment address such as an email address, phone number or Australian business number.

- **Fast settlement service**: Provided by the Reserve Bank of Australia, this makes it possible for every payment, regardless of size, to be settled in real time in central bank funds across each financial institution’s exchange settlement account before crediting the payee’s bank account.

- **Overlay service**: This is the payments-related product or service that can leverage the benefits of the basic infrastructure. Lovney says, “This is where the New Payments Platform breathes life into innovation and competition.” BPAY, Australia’s bills payment organisation, was the first overlay service to go live.

Source
Adrian Lovney, CEO NPP, in an interview with the European Payments Council\(^6\)

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**Figure 1**: Tier 1 capital position of the ‘Big Four’ Australian banks in The Banker’s Top 1,000 World Banks

<table>
<thead>
<tr>
<th>Position</th>
<th>Bank</th>
<th>Tier 1 capital (US$m)</th>
<th>Size (US$m)</th>
<th>Pre-tax profit (US$m)</th>
<th>Return on assets (%)</th>
<th>Loans to assets (%)</th>
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<tbody>
<tr>
<td>45</td>
<td>Commonwealth Bank of Australia</td>
<td>40,526</td>
<td>751,057</td>
<td>10,726</td>
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<td>Westpac Banking Corporation</td>
<td>39,980</td>
<td>665,527</td>
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<td>ANZ Banking Group</td>
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<td>65.02</td>
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<td>50</td>
<td>National Australia Bank</td>
<td>37,045</td>
<td>625,879</td>
<td>6,069</td>
<td>0.99</td>
<td>70.86</td>
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</table>

Source
The Banker, July 2018
2018, the market launched the New Payments Platform (NPP) for faster, data-rich payments between individuals, businesses and governments, with simpler addressing – using a unique ‘layered’ architecture and central bank settlement (see box-out).

Banks invested A$1bn into the new platform, which Slade believes is justified by the ability to provide “a convenient and easy to use service, with funds transferred between participating banks in less than a minute, 24/7 in most cases”. Slade has been involved with the NPP since 2014 and has been a member of the NPP board twice, once for Westpac and now again for NAB.

The ISO 20022 messaging standard also gives the platform more capability in terms of openness of data among banks. “Most of the correspondent banks use the standard as it gives them the option of direct entry into the local clearing system,” explains Slade.

Having those very high-level objectives from the RBA and then translating them to the payments industry was ideal, recalls Brad Pragnell, who worked on the NPP with the Australian Payments Clearing Association (APCA) and was subsequently hired by Payments Canada to advise on a similar project. “What was important in our thinking was that the new system would be a platform for innovation and competition. This meant that financial institutions saw the new system less as a compliance obligation and more as a commercial opportunity.”

**Broadly, NPP consists of a domestic messaging channel supported by SWIFT’s network partners in Australia, an addressing database to provide proxy identifiers for Authorised Deposit-Taking Institutions’ (ADI) customers (to facilitate simpler and more efficient addressing of payments, by linking short names (aliases), email addresses, mobile phone numbers and other identifiers with the account numbers of ADI customers) and a common software interface that will manage the communication flows between participants, the addressing database and overlay service providers which use the NPP payment infrastructure.**

SWIFT provides the ‘backbone’ for the secure and reliable movement of messages between ADI participants and initiates the settlement instructions with the RBA, which connects to the basic infrastructure (see Figure 2). A user of the system will no longer need to know the bank state branch (BSB) and account number of the payee. A checking service reduces the chance of payments accidentally being made into a wrong account, and lets payment service users know immediately in any instances it believes an incorrect payment has been made, explains Slade.

**NPP is for consumers, corporates and public institutions, touching practically every part of the economy, as SWIFT notes in a press release.** The core features of the system enable the fast transfer of value between accounts serviced by the participating ADIs. These transfers are cleared, settled on a ‘line-by-line’ basis (so that there is no settlement risk between participating ADIs) and posted to the recipient’s account in seconds.

**All change**

Aside from the basic infrastructure of NPP, it’s the overlay services that are really making the difference. These portals, apps and other tools allow mobile and web-based payments with more detailed information and let people request money from others. For example, the settlement of a restaurant bill among a group of diners can happen over a mobile, or the payment of a

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**Figure 2: Overview of SWIFT’s solution for Australia’s NPP**

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**We can now welcome a new customer and have them active in minutes, not days**

Rachel Slade, Chief Customer Experience Officer, National Australia Bank
provider. For some time, the technology partnership has allowed customers to easily upload their banking data to Xero, with NAB using cash flow data from Xero to inform lending decisions.

The next step, says Slade, is to enable customers to make payments directly out of Xero, truly providing a seamless experience. NAB is also developing a multi-authenticated capability where customers can create multiple payments from within the Xero platform and authorise them in bulk from the NAB mobile banking app.

Change is costly, but is it worth it?
While she admits the bank will never recover the investment in NPP in a traditional business case sense, it was worthwhile. “The market absolutely needed to do it,” she asserts. “Real-time, convenient, data-rich, easily addressable payments are a must to meet customer expectations. This is the service they are getting in their other experiences such as travel, shopping and entertainment.”

Slade also believes there are use cases that create real value for businesses in terms of speed, data, real-time authentication of the payment, and removal of paper. “The value equation here stacks up,” says Slade. “And, as the market scales up and new services become available, this value increases. Customers making a repeated number of direct debit payments or cheques can see these cleared several times a day with RTGS.”

Additional value has also been created. One of the collateral benefits of implementing NPP is that whole sections of the banks’ infrastructure have had to be uplifted from a batch to a real-time world, including fraud and payment operations. Slade shares that, with NPP, “internally, banks had to move to more sophisticated tools for things like fraud detection, which drive bank-wide benefits.”

While NAB customers continue to embrace the NPP, Slade expects all banks should be at full scale by October 2018. “It’s the biggest market change in 20 years and has seen collaboration even among competitors. Everyone around the table has come together and we’ve opened our minds to show connectivity and where data has opened up banking to a broader set of solutions,” she adds.

What’s next?
NAB is looking to emulate what has been achieved in its home market with NPP in a cross-border context. To do this, it has joined Deutsche Bank, with whom it has a correspondent banking clearing relationship, as one of the early adopters of the SWIFT gpi initiative to make its systems open to third party providers. “gpi is very interesting as it’s solving a problem,” notes Slade. “It addresses the need to know when a payment will arrive, as well as issues around timeliness and transparency. By using NPP domestically and gpi cross-border, we can see the payment travel from Singapore to the beneficiary’s account in Australia in a minute. We do this by collaborating with the industry, driven by the customer demand.”

Moving swiftly with APIs for international payments tracking, NAB connected to the SWIFT gpi cross-border payments tracker in September 2017 to provide greater transparency to customers, and certainty of the status of their payment. The API links the SWIFT gpi Tracker database with the bank’s systems, and subsequently integrates the tracking information into their client portals and applications. It’s with this tracking that NAB has been able to transform its customer offerings for business and retail customers, as described above. “To get this into market we had to work with partners all over the world to change the way we did business with each other. I think we were a bit ahead of the curve, and not everyone is there yet, but they will be!” asserts Slade.

The next step will be for NAB to be able to provide gpi’s tracking capabilities direct to

“My favourite solutions are the ones that I’ve co-designed with customers

Rachel Slade,
Chief Customer Experience Officer, National Australia Bank
customers. NAB has joined a SWIFT gpi for Corporates pilot programme, which focuses on giving corporate customers access to gpi through MT101 messages (see SWIFT gpi feature on page 56).

The vision, Slade explains, is to further understand the blocks of capability, customer pains and the sophistication of connectivity with API. “Then you can do anything,” she maintains. The Australian government aims to phase in open banking with all major banks, with data on credit and debit card, deposit and transaction accounts by July 2019 (see country focus on page 12).

With these initiatives and now that NPP is live, and growing rapidly, the Australian payments industry has some emerging challenges about how to deal with legacy infrastructure that will ultimately become redundant. Some of that important work is being done by the Australian Payments Council7 where Slade is a representative. However, she believes those challenges are outnumbered by the opportunities for further change. “At NAB, we can see a future where our customers can take full advantage of real-time, data-rich, highly available, easily addressable payments to power their businesses, domestically and cross-border,” she concludes. “This is where payments coming from offshore can enter the domestic clearing system in real time. Where invoicing, payroll, property settlement and corporate actions are seamless and paper-free. And this future is right in front of us.”

Sources
1 See https://nab.co/2MviWam at news.nab.com.au
2 See https://nab.co/2OJidQa at news.nab.com.au
3 See https://bit.ly/2Bl4e1g at rba.gov.au
4 See npa.com.au
5 See https://bit.ly/2MdbSvx at europeanpaymentscouncil.eu
6 See https://bit.ly/2MPXKZo at swift.com
7 See australianpaymentscouncil.com.au
# The road ahead

*flow’s* regulatory agenda for the coming months, showing the key regulations and events that will impact our clients

## Q1 2019

<table>
<thead>
<tr>
<th>WHO will be impacted</th>
<th>WHICH regulation or initiative does it relate to</th>
<th>WHAT will happen?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporates</td>
<td>Vietnam’s new cybersecurity law</td>
<td>New cybersecurity law that contains data localisation effects among other requirements. In force from 1 January 2019</td>
</tr>
<tr>
<td>Issuers</td>
<td>Securitisation regulation</td>
<td>In force from 1 January 2019</td>
</tr>
<tr>
<td>Issuers</td>
<td>Payment Services Directive 2 (PSD2)</td>
<td>EBA Guideline on fraud reporting under PSD2 published July 2018 implemented 1 January 2019</td>
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<tr>
<td>Insured depository institutions</td>
<td>Deposit Insurance Fund (DIF) surcharge assessment (Dodd-Frank Act)</td>
<td>If the DIF reserve ratio does not reach 1.35% by 31 December 2018 (provided it is at least 1.15%), a shortfall assessment on large banks will be imposed on 31 March 2019 (payable in full on 30 June 2019)</td>
</tr>
<tr>
<td>All market participants</td>
<td>The EU Capital Markets Union</td>
<td>Roadmap to advance the corporate bond markets</td>
</tr>
<tr>
<td>Central securities depositories (CSDs)</td>
<td>Central Securities Depositories Regulation (CSDR)</td>
<td>Most EU CSDs have to be authorised by 31 March 2019. They must also provide segregated accounts to comply with CSDR</td>
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## Q2 2019

<table>
<thead>
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<th>WHO will be impacted</th>
<th>WHICH regulation or initiative does it relate to?</th>
<th>WHAT will happen?</th>
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</table>
| • Central Securities Deposits (CSDs)  
• National Central Banks (NCBs)  
• Custodians  
• Market participants | • TARGET2-Securities | • T2/T2S consolidation: UDFS 2.0 Market consultation runs from mid-January to the beginning of April 2019, with publications scheduled for January 2019 |
| • Banks  
• Payment service providers  
• Payment users | • Payment Services Directive 2 (PSD2) | • EBA ‘Guidelines on complaints handling’ extended to new firms (eg third party providers) established under PSD2 from May 2019 |
| • Market participants | • The EU Capital Markets Union | • Adoption of legislation establishing a unified EU classification system of sustainable economic activities (taxonomy) a part of the EU’s ‘Action Plan for greener and cleaner economy’ published in March 2018. See https://bit.ly/2D9yrvX at europa.eu |
| • All market participants | • European Parliament Elections | • European elections are held every five years. The next election will be between 23 and 26 May 2019. Following the UK’s referendum, 27 of the UK’s 73 seats will be redistributed to other countries, while the remaining 46 seats will be kept for future enlargements |
| • Financial institutions  
• Brokers/dealers  
• Fund managers | • Securities Financing Transaction Regulation (SFT-R) | • Phasing in of SFT reporting commences |
| • Issuers  
• Investors  
• Intermediaries | • Shareholder Rights Directive II (SRD II) | • An amending directive requiring transposition into each Member State’s national law. Implementation expected Q2 2019 |
| • Corporates  
• Financial institutions | • Asia-Pacific Financial Forum and Asia-Pacific Economic Forum endorsed ‘A strategy for the digitalisation of trade and supply chain finance’ for finalisation in 2019 | • While not specific regulation, this demonstrates the momentum to seek legal and regulatory reforms, market standards and interoperability guidance to promote the use of digital trade finance. See https://bit.ly/2MGvqrF at abacaonline.org |
Between January 2016 and October 2017, more than US$7bn was lost to fraud by corporates worldwide. The Association of Certified Fraud Examiners’ (ACFE) findings highlighted that “internal control weaknesses” were responsible for almost half of the 2,690 cases they covered over the period.

The need for fraud controls at all levels of business is clear and although regulation protects clients of financial institutions to some extent in the case of a fraud, there is more that businesses can do to help protect themselves.

Businesses can all too easily get caught up in client demand for fast turnarounds, and worry about delays incurred by running fraud checks. However, from a bank perspective, we see corporates making payments to accounts upon request and then realising the payment premise was never genuine. This article provides an overview of this expanding area of financial crime following Brendan Goode’s article ‘Combating cybercrime’ in flow, October 2017.

Definition and background
Fraud is defined by many different legislative bodies around the globe. For example, in the UK, the Fraud Act 2006 refers to “dishonestly making a false representation”, “dishonestly abusing a position” and “dishonesty failing to disclose information”, all with intent to gain an advantage or cause a loss. The German Strafgesetzbuch looks at fraud as occurring when someone, with intent, gains an illicit advantage for themselves or damages an advantage for another.

The theme is clear; there must be some dishonest conduct or intent to knowingly gain an advantage that one is not genuinely permitted to obtain. At the same time, no actual loss or gain needs to happen. This is a likely reason why many companies do not see that they are the victims of fraud, as they have not lost any assets off their balance sheet. In turn, this can lead to lack of investment in fraud prevention.

According to the ACFE, more than 90% of fraud is enabled by phishing. So, a fraud attack is as successful as the weakest link in a target’s chain. According to PwC’s 2018 Global Economic Crime and Fraud Survey, only 49% of global organisations reported that they were a victim of fraud and economic crime. This is surprising and is a likely indicator of the lack of awareness in many corporates of what fraud is. The report advises to “think of fraud as the biggest competitor you didn’t know you had”.

Social engineering
Criminals run fraud scams like businesses, researching their targets. They will not necessarily try to obtain cash funds; in fact, many fraudsters are looking for data on individuals, which is fast becoming a commodity in its own right. This is where the difference between a chance fraudster and an organised fraudster occurs.

Organised criminals will scan social media, including LinkedIn, to produce very convincing victim profiles. They can use this information to communicate with targets as if they are familiar with them. This can then be combined with other
types of fraud, such as business email compromise or invoice redirect.

Emails with bad grammar promising an inheritance from a long lost relative still go on but the attacks are now much more sophisticated. Emails very closely resemble legitimate emails from social media and may even spoof the email address of the legitimate source. The email can be tailored specifically towards an individual, and this is known as ‘spear phishing’.

Other methods of obtaining data are summarised on the Deutsche Bank cybersecurity resource site, which includes a downloadable checklist. They include:

- Vishing – where fraudsters telephone their target purporting to be a trusted source, to obtain user names and bank account access.
- Smishing, where an SMS is used inviting the target to click on a smartphone link.
- Phishing, where email is used to persuade recipients to click on a link providing access to account details and passwords stored on a computer.

According to Interpol, around US$1bn was lost to this form of social engineering in 2015.

**Business email compromise**

One of the biggest challenges we see corporates facing is the “business email compromise” (BEC). This is an attack that preys on employees trusting all instructions they receive are authentic and genuine. Again the numbers are large and the losses are unlimited. The FBI reports that over a three-year period 40,203 domestic and international incidents reported to them resulted in a US$5bn exposure.

A typical example is a business that has a longstanding relationship with a supplier and is requested to make a payment for an invoice to a fraudulent account with different account details to the normal account. The request may be made via telephone, fax, or email and appears to originate from the genuine supplier.

The invoice may be genuine so far as the payment is required for goods ordered, but the actual invoice has been intercepted and the beneficiary account details changed so the payment is redirected. A subtype of business email compromise is “CEO fraud” where instructions appear to originate from the CEO who makes requests from a position of authority.

If an email is received, the subject will spoof the email request so it appears similar to a legitimate request. Likewise, requests made via facsimile or telephone call will closely mimic a legitimate request. Very often the request either comes from a hacked email system or the email address is spoofed, that is, mimicked to resemble a genuine address.
The basis for the style, tone and details of the BEC attack is a well-planned social engineering attack. Fraudsters create their attacks by accurately mimicking the style and tone of the person they are pretending to be, and the imitation can be difficult to spot.

In summary, a CEO fraud social engineering attack is structured as follows:

**Step 1: Initial contact**
The fraudster impersonates a high-ranking manager (e.g. the president, CEO, CFO) or a trusted partner (e.g. lawyers, notaries, auditors, accountants etc.) of the company.

They contact a specific employee, for instance a finance manager, an accounts payable clerk or any other employee they consider to be useful. The contact may be established by phone calls (imitating the voice) or emails (imitating the email address). The email request may include additional information that could add further legitimacy to the request. This information may have been obtained in a number of ways, for instance by hacking the actual CEO’s email account, through phishing, social engineering or open source research.

**Step 2: Urgent and exceptional request**
The fraudsters request an urgent bank transfer of a large amount to a bank account.

**Step 3: Persuasive dialogue**
To convince the target, the fraudster will use a combination of the following approaches:
- **Use of authority:** It is an order to do this
- **Confidentiality:** This project is still secret and its success depends on this transaction
- **Appreciation:** I count on you for your efficiency and discretion
- **Pressure:** The success of the project rests on your shoulders

**Step 4: Transfer order**
If steps 1-3 have been successful, the targeted employee will transfer funds to the account of a fraudster. The funds will often be immediately redistributed to other bank accounts, which, once the fraud has been identified, will make it difficult, if not impossible, to recover the funds.

Recovering the funds can be complicated for a combination of reasons. First, the victim of the fraud may not realise they are the victim until their finance teams reconcile their payments against their invoices, or worse still, the supplier they paid reconciles and the process takes even longer for the victim to realise the payment was made to a false account. Victims are also sometimes reluctant to report fraud on the basis that their reputation may be damaged by admitting they are a fraud victim.

Second, fraudsters will move funds into an account that they are able to control. The contact may belong to a vulnerable person, conned into allowing a fraudster to use their account, or someone has sold a dormant account to criminals who have then left the country. The fraudster will then split and move the funds via a network of mule accounts, often located in different jurisdictions to the victim’s account.

Speed is key to funds recovery. As soon as fraud is discovered there should be no delay in informing the bank who will attempt to recover the funds. A break in the chain of receiving and paying invoices improves the chances of checking the correct payment address.

On 11 June 2018, the FBI launched ‘Operation Wire Wire’ to counter the threat of BEC. They produce a useful atlas of common BEC locations and it is easy to see in this representation how far funds move. This makes it even harder for banks to recover assets.

Successes are forthcoming, a large number of arrests occurred last year across the regions shown but this goes to show how money can change hands quickly.

**Mule accounts**
Mule accounts are used to launder the proceeds of fraud. Mule account holders could be complicit in the fraud or could unknowingly allow their accounts to be used. This is a bank account that has been taken over either by compromising the account details, or, knowingly, the account owner has sold their account details or is in fact a fraudster themselves, or where fraudsters persuade vulnerable persons to let them use their account. This is known as “cuckoosing”. Much like the bird, it hosts itself in someone else’s nest. The fraudster then uses the account as their own, accepting funds and making payments. They will not use the account for very long, and very often, the person who genuinely owns the account is unaware of the activity until much later.

**Account takeover**
Account take over occurs where fraudsters are able to access an account and operate as if it were their own.

People often use the same password across more than one secure login. An example of this is a fraudster emailing you with a convincing social media request with a link to the genuine site. As the person clicks through the link, a keylogger is installed and notes the user name and password. The fraudster then uses this to attempt to gain access to other services such as online email services or market places.

At risk are marketplace and their sellers, who trade on an account. The account could be compromised and the funds that the seller has built up over time is then moved to a mule account.

**Fake documents and trade finance fraud**
This is not an area we have seen too much of, but it is a risk, particularly in trade finance because of what is known as the “fraud exception”, where presentation of fraudulent trade finance documentation means the bank does not have to pay. Fraud within the trade finance space is closely linked to money laundering schemes. Trade finance is a complex area and typically involves the shipping of large quantities of goods at short notice, often changing hands multiple times along the journey. On average, only 5% of shipping containers are checked by port authorities,
so the potential for criminal gangs to ship non-existent goods to facilitate crime is high. Diligent checks, knowing your clients and intermediaries as well as inspecting paperwork will work towards mitigating the possibility of fraud.

Financers of commodities can end up taking on the risk of the seller when offering trade finance on the basis that the underlying goods to be shipped are of the specified quality and quantity. If the documentation is faked to show a higher quality of goods than is actually shipped then the loss is held by the financier, often with no recourse on the goods. This is why banks employ collateral managers to monitor goods stored in warehouses that lending is secured on. And in 2014, the Qingdao scandal, involving multiple pledging of the same metals for collateral with warehouse receipts, rocked the industry.10

The International Chamber of Commerce Commercial Crime Services provides training and fraud prevention services with its International Maritime Bureau “dedicated to the prevention of trade finance, maritime, transport and trade fraud and malpractice”.11

Internal fraud
All too often overlooked by companies is the threat of internal fraud. According to the ACFE,1 around half of all corporate fraud is committed against companies by their own employees, with 14% of employee fraud relating to expenses. The average length of time before the fraud is discovered is 24 months and businesses struggle with accepting that this has occurred with long-serving employees.

Keeping a discreet eye out for the following indicators is sensible and does not encroach into an aggressive surveillance regime:
• Evidence of lavish lifestyle.
• Mood changes and unusual generosity.
• Employee in financial difficulty.
• Defensive behaviour when expense submissions are queried.

Prevention measures include:
• Know your staff by having a robust onboarding procedure.
• Set up a confidential reporting system for employees to report fraudulent conduct anonymously and in confidence.
• Conducting a fraud risk assessment across the company to identify weak points.
• Ensure a separation of duties between accounts receivable and accounts payable; this will allow for more time to check for external fraud attempts, as well as removing the temptation for collusion with fraudsters.
• Reviews of expense reimbursements and dip-sampling. Checks should be conducted on a random basis to ensure that expenses are genuine and are within business policies.

Criminal gangs defrauding a multi-million-pound bank are no different to the couple of fraudulent tradesmen pretending to fix your roof and charging you for non-existent repairs. Companies are focussed on the online threat of fraud, which is absolutely right, but “old fashioned” fraud is still a way in for criminals to steal money. As online fraud controls improve, fraudsters will return again and again to exploiting the human element of the chain.

Peter Blackall is the Fraud Risk and Controls Manager for the UKI region at Deutsche Bank. He served in the Royal Navy as an Engineering Compliance Officer and then became a police detective, where he specialised in vulnerable adult investigations before joining Deutsche Bank.

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Outlook for fraud prevention
For me, the same issues apply to a single vulnerable adult as they do to any corporate body; dishonest people exploit people’s sense of trust or sense of urgency to defraud them.
At your service
During the past 12 months, trade has been at the front of everyone’s mind for two reasons. First, during 2017 it looked as if the world was pulling out of its post-financial crisis trade torpor. The International Monetary Fund (IMF) World Economic Outlook for April 2018 showed a positive picture of export volume and GDP growth, with export volumes growing year-on-year at a rate higher than GDP growth for the first time since 2012. The ICC Trade Survey, on the back of this, made clear the view that “trade is on its way to its familiar, pre-crisis position as the engine of global GDP growth” (see Figure 1).1

Second, the spectre of trade wars and protectionism, that has hung over the trade sector, shows no sign of diminishing in importance into 2019.2

As I noted in the H1 2018 issue of flow, while politics dominates the institutions and frameworks of trade in the way it is doing at the moment, there is an ongoing risk that the economic and business benefits derived from trade are weakened.

Changing nature of trade

Arguably, the issues that have provoked economic nationalism in the US and retaliatory measures elsewhere3 are symptomatic of the changing nature of trade itself:

- The balance of trade power has shifted markedly towards emerging economies, particularly South Korea and China. If power is rebalancing, this in itself is a threat to the established order, and to established institutions such as the World Trade Organisation (WTO).
- Goods trade, for example in electronic goods, contains a substantial amount of intellectual property, meaning that the lines are increasingly blurred between goods that are purely civilian in purpose and goods that also have a military or security application.
- Services trade is increasingly embedded in goods trade (through manufacturing as a service, for example) and part of increasingly sophisticated supply chains. Digital trade, while relatively small in terms of its take-up at present, is growing in importance but is not measured in terms of size or volumes in any meaningful way.

There is little doubt that the tectonic plates of trade are shifting, and, indeed, have been shifting for some time (see Figure 2). If we look just at values of trade rather than at volumes, then we can see more clearly what is going on.

In 2006, the value of trade in services was just 20% of the value of trade in goods. By the end of 2017, services were 30% of the value of world trade in goods. Both goods trade and services trade fell back between 2014 and 2015 but, while services trade has gathered pace since, goods trade has continued to decline in value terms.

Of course, some of this is simply because lower commodity prices have dampened the values of goods trade. However, it is clear that much of the increase in trade that was reported by the WTO and the IMF in 2017 was due to services picking up rather than goods.

It is also the case that the biggest trading nations in the developed world retain their influence over services-trade compared with, say, China (see Figure 3).

The top six services trading nations account for more than 50% of world imports and exports. The US is clearly the largest, with exports worth US$880bn in 2017. This is more than twice the level of the UK’s US$320bn or China’s US$295bn of exports. China has the largest trade deficit in services, although it has a trade surplus in goods, and even though Germany has the world’s largest goods trade surplus, it still has a deficit in services.

Services

When it comes to services, there is a far greater dependency of China on the US: the US exports around US$60bn of known services to China. This is just over 20% of China’s total imports of services and has been growing at an annualised rate of nearly 9% since the financial crisis. To some extent this represents the integration of the

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**In response to continuing emerging market demand, the world order of trade as we know it is changing. But this is no longer just about merchandise – services trade has taken off with significant flows into emerging Asia. Dr Rebecca Harding charts the sea-change**

**Figure 1: 2017 GDP and goods and services export volume growth (%)**

<table>
<thead>
<tr>
<th>Region</th>
<th>GDP Growth</th>
<th>Goods and Services Export Volume Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENA</td>
<td>2.5%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>3.8%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Latin America</td>
<td>4.4%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Advanced economies</td>
<td>5.6%</td>
<td>7.1%</td>
</tr>
<tr>
<td>G7</td>
<td>6.0%</td>
<td>7.5%</td>
</tr>
<tr>
<td>World Emerging markets</td>
<td>7.8%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Emerging Asia</td>
<td>8.5%</td>
<td>9.0%</td>
</tr>
<tr>
<td>CIS</td>
<td>9.2%</td>
<td>9.7%</td>
</tr>
</tbody>
</table>

Source: IMF World Economic Outlook
The value of services the US exports to China

Chinese economy into the global economic system since the crisis, as more banks and service organisations moved to China to take advantage of the rapid recovery in emerging Asia between 2010 and 2013.

The high levels of annualised growth since 2011 are indicative of an emerging economy with very little by way of imports to start with, and that has grown very rapidly over the period. Projected rates of growth are more modest, at between 1% and 6% for each of the top 10 sectors to 2021. Service imports from the US have grown overall at just over 14% and are projected to continue their growth over the next few years at 5% annualised to 2021.

But what is more interesting from the chart is the actual sectors themselves. The chart presents the 10 fastest-growing sectors over the past five years. While the tariffs on iron and steel have been hitting the headlines, fewer inches seem to be given to the consumption of government services (including military

Source: Coriolis Technologies, 2018

Figure 2: Value of world trade in goods vs value of world trade in services (US$bn), 2006-2017
services), research and development, not to mention intellectual property imports from the US. Outflows of services look set to continue their upward trajectory.

While the US is important to China, it faces the risk of a slowdown in Chinese appetite for US goods and services as China becomes more self-sufficient, and hones its own expertise.

No room for nationalism
Despite some of the recent headwinds, there is every reason to be hopeful about trade patterns across the world. Practitioners in the sector have long been aware of the fact that global trade in goods and services means greater inter-dependency, both of ideas and intellectual property, and also of security. The biggest risk to the sector as we move into 2019 is that economic nationalism fails to acknowledge this reality. Trade in services is characteristic of the challenges that are faced because so much know-how, which is easier to transfer and tailor, is packaged into the products. We cannot turn back the clock: as digital trade grows, this will become more important, not less. Maybe this is the time for a little realpolitik in international trade negotiations.

Dr Rebecca Harding is an independent trade economist and former Chief Economist of the BBA. She is the Founder and CEO of Coriolis

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Sources
1 See https://bit.ly/2sFshjT at db.com
2 See ‘Born in the USA’ at https://bit.ly/2OvHMoD at db.com
3 See https://bit.ly/2mXcNVL at db.com
SWIFT gpi payments accounted for more than 30% of total payment flows in July 2018, with a total of 5,000,000+ messages transmitted by the top 50 end to end regional corridors (representing 40% of the total gpi flows). This graphic visualises where those top flows went, with the busiest corridors being those connecting China and North America and the busiest countries and territories being the United States, mainland China, Hong Kong, the United Kingdom, and Singapore.
Nature of the beast

How do commodity-backed structures work in the face of adversity? *flow*’s Clarissa Dann takes a closer look at Ukrainian metals and mining group Metinvest, and how it worked with its financiers to stay on its feet after a commodity price collapse, geopolitical turmoil and an economic downturn.
When prices are high, commodity finance deals seem pretty straightforward, but it’s harder to make money safely when prices come down – that is when the structures get tested.

Two that have stood the test of time are pre-export finance (PXF) and prepayment finance (PPF) facilities. These are, in the words of Deutsche Bank’s Global Head of Structured Commodity Trade Finance, John MacNamara, “performance-based lending” structures where the credit is structured around an export contract between an exporter (the seller) and an off-taker (the buyer). The proceeds of the exports are “typically used to enhance the repayment of the loan and the credit risk of the borrower can be monitored through the due performance by the borrower under the export contract”.¹

Financing growth
A long-standing client of Deutsche Bank, Metinvest had been an enthusiast of the PXF structure for some years as it built capacity and grew revenues, a high point being the US$14.189bn in revenues it posted in the 2011 accounts, up 51.6% on the previous year and driven mainly by record sales of steel and iron ore products. It had also vertically integrated its operations into two separate divisions of steel and mining because, as it said at the time, the company’s assets were consuming all the raw materials it produced.

Metinvest had enjoyed a strong PXF performance track record, from well before its incorporation within the System Capital Management Group in 2006,² navigating through the ‘Orange Revolution’ and then the Global Financial Crisis without so much as even a covenant waiver, which was remarkable in 2008-09 when steel and iron ore prices collapsed by anything up to 80%. They also achieved scale, with Ukraine’s largest commercial syndicated loan of US$1.5bn, also on a PXF basis, in 2007. This was a record borrowing in the company’s history, the largest loan attracted by a private company in Ukraine during 2007, and its repayment confirmed to the international financial community the company’s “conservative financing approach and flexible business model”.³

While structured commodity trade finance was an important source of dependable liquidity, Metinvest was also in a position to tap the capital markets. It had issued two Eurobonds – US$500m in
to the bare minimum, the company was forced to default on a US$113m payment due under its PXF facilities and confirmed that discussions with PXF lenders were “ongoing” with a view to “negotiating a standstill and waiver agreement, paving the way for a broad rescheduling of the group’s debts”.

2010 and US$750m in 2011 – totalling US$1.25bn, and the fixed rate senior secured notes had original maturity in 2015 and 2017 respectively.

The unfolding of the crisis in Eastern Ukraine changed everything. However, the hryvnia (the Ukrainian currency) collapse assisted the company as an exporter, with lower local currency costs and existing contracts having been negotiated in hard currency payments.

We can work it out
In March 2015, a full year into the crisis, after running down its cash reserves

On 9 April 2015, the company issued a press release announcing that it was in default and was beginning talks with the holders of its 2015, 2017 and 2018 bonds about a postponement of the repayment of principal on bonds maturing on 20 May 2015. It also sought consent that bondholders would waive their right to make claims in connection with certain cases of default that had occurred or would occur in the future.

The nature of PXF lenders is that repayment is credit-enhanced by the underlying commodity exports they finance, but, should commodity prices fall dramatically, or production and exports suddenly be hit, there may not be enough exports by value to repay, and then they face delay. “When prices go back up again, and production recovers, then repayment should catch up again as well, off the back of the improved flows. It’s why you should always see a ‘cash sweep’ in successful PXF restructurings,” explains MacNamara.

This isn’t necessarily how bondholders may see it, of course. The PXF lender is uniquely incentivised to keep the company alive.
This means all lenders working together with the objective of everyone getting repaid – eventually – and trying to avoid a situation where some lenders try to force liquidation. In liquidation, everyone is unsecured, so the restructuring is based on this and the restrucrter having control of payment flows and all the security. From the bondholder perspective, though, while the company is alive, they are unsecured creditors, but the PXF lenders control the export revenues and get them first (and here there were no domestic revenues to be had, due to the country collapse). But if the bondholders push the company to liquidation, then the PXF lenders no longer have their ‘future’ security, and all creditors are in the same boat.

Reconciling emerging market debt approaches

Metinvest’s great achievement was to convince sufficient bondholders that the boat would be a substantially bigger one if they let the company run on. The challenge then for the restructurers is that the bondholders have taken a higher price because they have accepted a higher level of risk, with unsecured bullet repayment at final maturity; conversely, PXF lenders have accepted a significantly lower price to take a lower order of risk, which is amortised (after a grace period of two years) and backed by the export flows, and reconciling these two conflicting approaches to emerging market debt requires a foot in both conceptual camps.

The traditional model in restructuring practice, where the inevitable question, “how much do we think they are going to sell in the next 12 months?” was, in this case, severely impacted by the relevant commodity prices for iron ore and for steel. Not only was this price all over the place, but so were the forecasts for where it would go through 2016 and 2017. Happily, the price has now recovered to a reasonable level, but that’s not what the forecasts were saying in the winter of 2015/2016. This is a dollar-earning group, but a large proportion of costs, as we have seen, are in hryvnia – so knowing what FX rate to use was a challenge, given the volatility of FX movements. Production output estimates were another challenge. A trainload of iron ore was blown up on a major bridge and careered into the waters below.4 Metinvest didn’t wait for the Ukrainian government to repair the bridge and did so themselves in two days to maintain production, the pricing of which was impossible to estimate.

The final denouement of the restructuring broke the surface on 23 December 2016 when Metinvest announced that the principal finance documents had been agreed, although it still took another three months to work through all the legal processes and conditions.

Turning the corner

On 22 March 2017, Metinvest announced the completion of the US$2.3bn restructuring;5 the series of guaranteed notes due in 2016, 2017 and 2018 were cancelled, delisted and replaced with new listed senior secured notes totalling approximately US$1.2bn, due in December 2021 with new terms and conditions. The four PXF syndicated loan agreements were combined into one facility of around US$1.1bn due in June 2021. A shared security between bondholders and PXF lenders provided an incentive to allow the company to continue to perform. “Nobody was allowed to run for the exit,” commented one lender.

Commenting on the deal, CEO Yuriy Ryzhenkov said, “The Group has always respected its obligations to creditors, having never demanded a write-off of any part of debt. With creditors’ support, we have arrived at a common solution, cured defaults, deferred repayments for five years and issued new instruments. As such, we have increased our creditors’ confidence and maintained the Group’s access to international capital markets.”

Fast-forward to 24 April 2018. The political situation stabilised in Eastern Ukraine and Metinvest reorganised itself so that it could manage without supplies and materials from trapped assets in the occupied territory of Donbass, in effect freezing the conflict. In addition, commodity prices had rebounded. In this environment, the 22 March 2017 deal, while good at the time, was now restrictive, particularly the shared security between the PXF lenders and the bondholders. To tap the bond market further, Metinvest needed to

This achievement is testament to the strong reputation of the borrower and the robust credit structure

Boris Jaquet, Head of Distribution EMEA, Deutsche Bank
unbundle the restructured facilities, which had to be done in one transaction. This meant removing the shared security, along with the additional limitations on dividend payments and acquisitions that were agreed during the restructuring, so that they could re-enter the bond market, refinance the bonds and use some of the proceeds to pay down the PXF (reduced to US$624m on 8 May 2018) – which had been in restructuring rather than repayment mode.

“We agreed everything with the PXF with certain conditions on repayment, and some price increasing. Although the total tenor of the facilities was extended to 4.5 years, the average life of the facility decreased because the PXF had a large repayment at the end – but they accelerated the repayments profile,” explains Sander Stuijt, Head of Structured Commodity Trade Finance EMEA at Deutsche Bank. Deutsche Bank and ING served as global coordinators and, together with Natixis and UniCredit, acted as joint bookrunners of the bond refinancing and coordinating mandated lead arrangers of the PXF deal.

The deal had a lot of moving parts and participants, but track record is all. Boris Jaquet, Deutsche Bank’s Head of Distribution EMEA, reflects, “It had been a major exercise to manage 26 existing lenders to agree to the amendment and extension, while attracting new investors into the amended PXF and managing conversion of some lenders to new bond issuance. This achievement is testament to the strong reputation of the borrower and the robust credit structure.”

When the new US$765m PXF was all signed, Metinvest approached the bond market and issued US$1.592bn in new bonds that had the necessary liquidity, as they were not encumbered with the restructuring elements. On balance, notes Stuijt, the PXF lenders ended up with a more standardised PXF loan with increased pricing, albeit less security, and the bondholders were happy because they had a fully functioning liquid instrument.

Moving on up
The deal – following Metinvest’s posting of US$8.9bn with an EBITDA of 23% for the calendar year of 2017 – marked a return to comparative normality in the recovering Ukrainian economy, despite the latest difficulties facing Ukrainian exports as a result of lower steel prices, “weighed down by tariffs imposed by the United States” as summarised by the National Bank of Ukraine.

Chinese wisdom teaches, “The toughest steel is forged in the hottest fire,” and the Metinvest story demonstrates just that. Having been through rather a lot over the years, from the austerity of the post-Soviet era, through several revolutions, national economic mayhem, military conflict and commodity price volatility, the Metinvest story demonstrates that stubborn optimism, track record – and patient financiers with a collective approach to getting repaid – keep the home fires burning.

Sources
1 Chapter 12, 20 Years in the Loan Market (Loan Market Association)
2 See https://bit.ly/2OiSZvk at scmholding.com
3 See https://bit.ly/2xFryCG at metinvestholding.com
4 See https://bit.ly/2LHs0s5 at metalbulletin.com
5 See https://bit.ly/2K11tBc at metinvestholding.com
6 See https://bit.ly/2uRhipi at metinvestholding.com
7 See https://bit.ly/2vcvRmE at metinvestholding.com
8 See https://bit.ly/2uUVYzd at bank.gov.ua
University challenge

Ghana’s dependence on raw commodity exports has done little for its economy or its food security. It still imports most staple foodstuffs. *flow* reports on how export credit agency financing is building a university dedicated to sustainable development and agribusiness.
The discovery of oil has not changed the fact that the World Food Programme classifies Ghana as a low-income, food-deficit country.

While the exports of gold, oil and cocoa have underpinned strong GDP growth in recent years, this West African country’s dependence on raw commodity exports became painful when commodity prices tumbled. The fiscal deficit deteriorated and public debt was standing at 74% of GDP by the close of 2016.

Changing mindsets
With 27 million people to feed, agriculture has become a priority for the government – you can’t feed a nation on cocoa. The entire continent still spends a massive US$50bn a year on food imports, notes the Food and Agriculture Organization of the United Nations (FAO). Although farming accounts for 37% of Ghana’s GDP, this is spread out across myriad one- to two-hectare smallholder farms. Of its total 23.9 million hectare land space, around 57% is suitable for agricultural purposes, but Ghana is not anywhere near maximising its yield potential.

Another issue is the attitudes of young Ghanaians to farming as a career. An academic study based on interviews with students attending high schools in Tepa and Savelugu was published in Food Security journal (February 2017) and notes that farming is regarded by many of them as old-fashioned and as a job that commands little respect. As one 18-year-old from Tepa told researchers, “Farmers are not respected in society compared to jobs like a medical doctor ... the public needs to be educated to orientate young people and others to farming.” Another respondent said, “Young people think farming is dirty work so they want to be in the city for modern jobs.” The paper concludes, “The challenge is not so much how to get young people interested in agriculture, but how to make agriculture worthy of their attention.”

One entrepreneur, David Asare Asiamah, founder and CEO of Agro Mindset, has done just that by setting up an agriculture education programme in Ghana. He trained at conservation farms in the UK between 2009 and 2014, learning new skills in agricultural production and marketing, completing his postgraduate studies at the University of Reading. As he explains, “Agriculture forms the basis of pulling the nation out of poverty and attaining appreciable economic growth. This includes provision of raw materials, foreign exchange, and a market for the local agricultural industry.”

A modern approach
While Asiamah has been something of a beacon, engagement of the next generation of farmers needs more traction. Well aware of the poor press farming has as a career, the government is tackling this by repositioning agriculture as a vocational science.

The Ministry of Finance clarified in its 2017 financial statement that it exists “to promote sustainable agriculture and thriving agribusiness through research and technology development, effective extension and other support services to farmers, processors and traders for improved livelihood”. It went on to state that its goal for the next four years is “to modernise agriculture, improve production efficiency, achieve food security and profitability of our farmers, all aimed at significantly increasing agricultural productivity”.

In particular, it launched the “Planting for Food and Jobs” campaign, designed to encourage urban and rural citizens to take up farming as a full- or part-time activity, along the lines of the “Operation Feed Yourself” programme in the 1970s. Priority crops are maize, rice, sorghum and vegetables, with other crops to be adopted in subsequent years.

Financial support
In 2015, the International Monetary Fund (IMF) granted Ghana a three-year extended credit facility for US$918m. This was agreed on the basis that Ghana implemented reforms aimed at limiting its fiscal and current account deficits. Acting IMF Deputy Managing Director and Chair Min Zhu said that “a prudent borrowing strategy will be needed to ensure that financing needs are met at the lowest possible cost”. The fund’s support, noted Euler Hermes in 2017, “has restored some investor confidence and helped sovereign bond assurances”.

Priority projects approved by the Ghanaian Government qualify for a proportion of the IMF funding, and this included the establishment of a public university in the Eastern region of Ghana – the road map for which was launched by then-President, John Dramani Mahama, on 17 April 2013. In 2014 a bill was submitted to Parliament,
But how was a country already on a strict fiscal reform agenda going to pay for it? Deutsche Bank’s Milan-based Vice President of Structured Trade and Export Finance (STEF), Riccardo Rocchio, reflects, “Clearly, Ghana is in need of financing and they are creating differentiated social financing and developing export credit agency (ECA) solutions as an alternative to bonds – they are growing this instrument.” Ghana’s Ministry of Finance confirmed ECA finance as a key borrowing and finance strategy, listing “optimising non-concessional and external financing (emphasis on ECAs)” in a roadshow presentation entitled “Ghana’s path to economic transformation” given in December 2017.

Investment in education, particularly in the agricultural and environment sectors … is one of the most powerful development tools
Simon Sayer, Managing Director of Structured Export and Trade Finance, Deutsche Bank

The Italian job
The Ghanaian Government was not new to ECA finance, and in 2014 Deutsche Bank had already worked with Brazilian construction company Contracta Engenharia Ltda to arrange a US$172m ECA financing to fund the renovation of Ghana’s Kumasi Market, the largest open-air market in West Africa. US$135m of this was guaranteed by the Brazilian export agency, ABGF, because of the flow of Brazilian goods and services. Contracta had established a foothold in Ghana with the successful completion of an aircraft hangar project in 2012 and, having demonstrated competence and capability to the Ghanaian Government, had built its reputation from there.

Contracta Engenharia had been ramping up its overseas activities to diversify sales away from Brazil during the economic downturn there, and now has subsidiaries in Ghana, the UK, Italy and the Bahamas.

In the meantime, the Italian bank CDP Group, now managing the activities of export credit agencies SACE and SIMEST, had been showing particular interest in supporting trade with emerging Africa. According to Rocchio, SACE had available lines for Ghana that were waiting for the right project. The Deutsche Bank team and Contracta visited and worked with the agency to explain the opportunity to the Italian SME exporters that Contracta wanted to award technology, machinery, vehicles, and other materials subcontracts to. Without ECA cover these SMEs would not normally take the risk of exporting to West Africa. “Africa represents a strategic market for Italian exports and the financing of big projects in the area is decisive for the award of new contracts to Italian companies,” observed SACE’s Chief Sales Officer, Simonetta Acri.

Structuring the deal
In December 2016, Contracta Costruzioni Italia Srl signed a €45.6m engineering, procurement and construction (EPC) contract with Ghana’s Ministry of Education for both the design and build of the new University of Environment and Sustainable Development and the related infrastructure in Somanya.

At the same time, the Deutsche Bank STEF team were mandated by the Ministry of Finance to structure a financing package for 100% of this project amount. As arranger and agent, Deutsche Bank put together a buyer’s credit facility of €45.6m supported
by the Italian export credit system in the form of €38.7m in SACE and SIMEST covered financing, with the balance of €6.8m in a commercial loan.

Signed in May 2017, the SACE element comprised a 12-year tenor made up of a two-year grace period and a 10-year repayment schedule, with the first repayment starting in month 30. The commercial loan was for five years and comprised a six-month grace period and a four-and-a-half-year repayment period, with the first repayment triggered in month 12.

The positive impact on all the communities involved, linking know-how to excellence from various sectors and from three continents with a vision for sustainable development, was particularly satisfying, says Paolo Maestri, Co-Head of Corporate Finance Italy and Head of Global Transaction Banking Italy at Deutsche Bank.

**Key facts**

**GHANA**

| GDP | US$37.54bn |
| GDP growth | 4.5% |
| Public debt | 77% of GDP |
| Population | 27.4 million |
| Form of state | Constitutional democracy |
| Largest trading partner | India (23% of exports), Switzerland (10%), China (10%) |
| Largest export | Gold (37% of exports), cocoa, coffee and tea (24%), crude oil (18%) |
| Largest import | Petroleum (12%), road vehicles (11%), machinery (8%) |
| Strengths | Natural resources, political stability, good relations with international financial institutions |
| Weaknesses | Twin deficits (fiscal and current account), poverty, regional instability from Nigeria, Burkina Faso and Mali |

**Sources**

1. See https://bit.ly/1PKYo11 at wfp.org
2. See https://bit.ly/1Lnyq2F at fao.org
4. See www.agromindset.com
9. See https://bit.ly/2Aw8H0v at peacefmonline.com

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**Progress so far**

President John Dramani Mahama “cut the sod” for the construction of the university in a ceremony held on 30 December 2016, and work began on the 521-hectare site of the Somanya Campus in January 2018. In an interview that appeared in various Ghana newswires, Accra-based Professor Kwesi Yankah, Minister of State in charge of Tertiary Education, confirmed that the workforce would comprise 10% expatriates who had arrived to work alongside local architects and that “nobody should entertain any fear of importing a workforce from elsewhere”. He also confirmed that construction had been delayed because of technical issues which had since been resolved, and that the university should be completed by mid-2019.

Investment in education, particularly in the agricultural and environment sectors that have such relevance for Ghana, is, says Deutsche Bank’s Managing Director of Structured Export and Trade Finance Simon Sayer, “one of the most powerful development tools”. He concludes, “We are delighted to be assisting in this project for a new university that will be dedicated to these fields of higher education.”
Intelligent treasuries

Virtual account solutions don’t just provide more convenient access to cash, but also access to data in real time. Helen Sanders describes some of the next generation liquidity and investment management solutions for treasurers.
Most corporate treasuries have had a relatively stable operating structure over recent years, and many have mature liquidity management strategies in place, such as physical and notional cash pooling. Today, however, a unique convergence of regulatory, market and technology factors is inspiring a new generation of liquidity and investment management solutions that are transforming both treasurers’ expectations and banks’ responses.

Inspiration through regulation
Regulatory compliance is often associated with a heavy administration burden and more closely defined constraints. However, some of the regulatory changes that are now being implemented are creating new opportunities for innovation in liquidity management. For example, the second payment services directive (PSD2) and the introduction of Open Banking offers unprecedented access to bank information through open application programming interfaces (APIs). This is encouraging ground-breaking collaboration between different market participants, such as banks and financial technology (fintech) companies, to develop new value-added services. Not only do open APIs make it possible to design custom solutions and seamless integration to meet treasurers’ needs very precisely, but they can be developed far more quickly than many legacy solutions. Although Open Banking is focused on payments, increasingly, these solutions cover a range of related services such as risk, analytics, reporting dashboards and identity services.

The second key development is the development of faster and real-time payments. Early schemes, such as Faster Payments in the UK, have had low (but increasing) value thresholds, so they have typically been more suited to peer-to-peer and consumer-to-business payments than corporate payments. These schemes are now proliferating worldwide, including SCTInst in Europe. As real-time payment schemes become more prevalent, and clearing and settlement infrastructures modified to support 24/7 processing and visibility, they are now well-understood at a corporate and institutional level, including the potential to simplify cash management through improved cost efficiency, accelerated supply chains, enhanced liquidity and greater standardisation.

Virtual solutions for tangible benefit
In an environment of challenge, change and opportunity, treasurers remain focused on efficiency, cost-efficiency and scalability in both their treasury operations and liquidity strategy. This includes supporting day-to-day operations but equally, creating the capacity and
flexibility to integrate new entities in the future. Rationalising and simplifying bank accounts is a valuable way of achieving this. Many larger companies have already implemented sophisticated in-house banking structures, often including ‘on behalf of’ (POBO) and arrangements, either/both payments and/or collections (COBO). Under these arrangements, one entity pays or collects on behalf of group companies, so group entities should no longer have to hold physical accounts. First, cost, risk and administration are reduced. Second, liquidity is easier to manage as it is held in fewer accounts. Third, it is easier to integrate new entities, as opposed to opening new accounts, with the associated know your customer (KYC), connectivity and integration burden, and connecting these into a cash pooling structure.

However, corporations of all sizes, whether they have implemented an in-house bank or not, are now keen to take their cash and liquidity management to the next level of efficiency in both operational and liquidity terms. Rather than setting up new physical structures, such as accounts and cash pooling, these are increasingly becoming virtual. Virtual accounts, for example, typically complement COBO solutions. They resemble real accounts but are effectively shadow or ledger fields linked to a single physical account. Treasurers can set up as many virtual accounts as required, such as by entity, business line or even individual customers. Customers make payments to the virtual account, but remittances are automatically routed to a single bank account, usually, but not necessarily, by currency. The virtual account number is used as a reference field for automatic reconciliation, reporting and account allocation purposes.

While the initial driver of virtual account solutions is often to improve straight-through reconciliation (STR) and automatic account posting rates, the liquidity advantages are equally, if not more, compelling. Cash is automatically centralised into a single account (rather than multiple accounts), with cash available as soon as remittances are credited to the account. This will become increasingly significant as adoption of real-time payment schemes increases. In contrast, under today’s cash pooling arrangements, sweeps typically take place at the end of each business day, so liquidity is not available in the header account until the following business day.

Developing the concept of virtual cash management further, corporates are now also exploring the feasibility of virtual ledger management (VLM). This involves developing an in-house bank model that allows treasurers to manage payments and collections on behalf of group companies through a series of virtual account hierarchies. Like virtual accounts, a VLM model reduces treasurers’ reliance on external bank accounts, and is also suited to treasuries that work with multiple cash management banks. New VLM platforms will increasingly enable treasurers to leverage one VLM platform across multiple banks, taking the concept of dynamic cash concentration to the next level.

Unlocking the value of data
The value of virtual account solutions is not only access to cash, but also access to data in real time. With this data, treasurers can provide rich analytics and insights on liquidity and risk, and detailed intercompany reporting. For example, group entities can access virtual account statements and integrate data directly into their own systems for reporting and accounting. Treasury and finance teams can monitor customers’ payment behaviour to build sophisticated predictive analytics and enhanced cash flow forecasting.

In addition to data held in treasurers’ own systems, the use of open APIs unlocks a wealth of data held by their banks, presaging a variety of new liquidity solutions. As cash and liquidity management is increasingly conducted in real-time, APIs will enable treasurers to move cash to where it is required, including between banks, rather than relying on end-of-day cash sweeps. Consequently, ‘just-in-time’ liquidity management becomes possible for the first time, eliminating the need for large cash buffers and creating
additional investment opportunities. Furthermore, using APIs to connect data sources (including bank, internal and market data) and leveraging advanced analytics, treasurers can identify the best use of cash, such as debt paydowns, discount windows or the optimal investment maturity.

**Next generation investment policy and compliance**

The ability for treasurers to gain greater visibility and control over liquidity and make investment decisions with more confidence is particularly important in the current investment landscape. Slowly increasing interest rates in USD and GBP and continuing negative rates in EUR add complexity to corporate and institutional treasurers’ investment decisions. Money market fund reforms are due to be implemented in both the United States and Europe in 2020, and banks need to comply with the liquidity requirements of Basel III, which has clear guidelines around the value of customers’ operating balances. Treasurers are therefore aiming to offset yield without losing access to operating balances, while also investing cash surpluses with favourable rates.

The result is that many treasurers are reviewing their investment policies and processes, but the nature and conclusions of this review are quite different from the past given the advent of real-time liquidity and the opportunities created by technologies such as open APIs. For example, negative yield in EUR is prompting many treasurers to seek alternative solutions such as time deposits (which are more feasible as cash flow forecasting confidence grows through enhanced analytics), one day FX swaps to convert overnight investments into positive-yielding currencies and simple cross-border interest optimisation solutions. The aim of these discussions is not simply to establish a flexible policy that reflects the current and new world, but to automate adherence with the policy. For example, using open APIs, banks can automate execution in accordance with a policy, and provide immediate visibility through dashboard and compliance reporting. Similarly, FX APIs can automate FX swap execution or allow embedded FX services into customer tools to reduce FX risk and optimise liquidity.

**Ready for change**

We are still in the nascent stages of realising the combined potential of real-time liquidity, open APIs and sophisticated analytics using robotic process automation (RPA) and artificial intelligence (AI), but treasurers are quickly leveraging these opportunities to meet their operational and liquidity objectives. Whether doing so today or in one or two years, treasurers need to work with their banks and technology vendors, such as treasury management systems (TMS) enterprise resource planning (ERP) and ancillary fintechs to understand the implications:

- These systems need to be able to support open APIs, which may require an upgrade to a more recent version.
- The era of batch and end-of-day processing is coming to an end as clearing and settlement systems are upgraded to support real-time settlement, which has process, connectivity, decision-making and reporting implications.

Corporates and institutions alike therefore need to review and re-engineer their processes and procedures to reflect the new world, and position themselves to take advantage of new opportunities that richer data, analytics and APIs are creating.

The combination of regulatory, market and technology factors that are transforming cash and liquidity management provides treasurers with unprecedented flexibility and choice in the solutions available to manage their efficiency, cost and scalability objectives.

Furthermore, the move to real-time cash and data, together with intelligent automation and the use of AI and RPA, heralds a major shift in treasurers’ role. Rather than focusing on day-to-day adherence with treasury policy, many of today’s familiar tasks can be automated, enabling treasurers to focus only on exception management and enable the organisation to leverage their specialist skills in a more strategic way to add value to the enterprise.

Helen Sanders is a specialist treasury writer and consultant and was formerly Editor of Treasury Management International. She was previously Director of Education at the Association of Corporate Treasurers and Director of Sales & Marketing at SunGard (now FIS), following roles in corporate treasury and tax in the oil and technology sectors.

**Sources**

1 See ‘Real-time realities’ in flow H1 2018 at https://bit.ly/2MtScaS at db.com/flow

Visit us at db.com/flow
Proceed with caution

With a firm focus on the eventual benefits, treasurers continue to embrace digital technology and transform their departments’ functionality. Peter Williams shares the corporate perspective of what this means in practice.
In February 2018, responses to Euromoney from 4,695 financial institutions (FIs) and non-FIs (this group included corporates) from around the world gathered during 2017 indicated that, while most of them managed payments electronically, other cash management services fell some way behind (see Figure 1).

More than 88% of each FI/non-FI category confirmed that they had not used a non-bank financial company such as Alipay or PayPal for a cash management service. The report went on to note, “While the banks worry about the fintechs coming to eat their lunch, the reality is that even the biggest names in fintech payments still have some distance to cover to get anywhere near the dining table.”

Treasurers, notes the Association of Corporate Treasurers (ACT) Business of Treasury 2018 report, “…currently spend most of their time, on a day-to-day basis, on capital and liquidity management (30%), treasury operations and controls (25%), and risk management (19%)”. These functions have been at the top of their agenda since 2013. Increasingly, treasurers are “driving funding strategy and presenting a range of informed alternatives to boards”, with 45% of the 200 interviewed confirming they “considered themselves to be either defining strategy or working with colleagues to define strategy”.

This would not be possible unless a number of manual processes were now automated. There just would not be time. As ACT CEO Caroline Stockmann puts it, “Digital, for us treasurers, is focussed on moving money, storing data and carrying out day-to-day transactions, as well as more complex processes.”

Inquisitive and agile
Graham Taylor, Assistant Treasurer at mobile telecoms operator Vodafone, describes his company’s approach as “highly inquisitive” in terms of overall awareness of technology transformation. Scope ranges from “simple software improvements to the big picture, such as improvements around PSD2”. Specialist financial services organisation Moneycorp provides foreign exchange (FX), payment and treasury services for mid-caps and small and medium-sized enterprises (SMEs) as well as consumer FX services. Nick Haslehurst, Moneycorp’s Chief Financial and Operating Officer, says there is a three-weekly release cycle for new features on Moneycorp’s platform and believes that product offering trends that move from one-off delivery to continuous development are mirrored in treasury management processes.

He sees technology enabling the removal of a layer of the administrative burden that has blighted the treasury function. “Sensible use of digital technology will help treasury get on the front foot, demonstrating the real value of treasury such as better hedging strategies, better payment services, and identifying FX risk more quickly,” he reflects.

Blockchain benefits
An evolution rather than an overnight revolution, blockchain (based on distributed ledger technology involving the creation and recording of digital identities) has the potential to monitor and record assets in real time and gain transparency of who owns them, of settlement information and transaction details. This, says an explanatory Deutsche Bank video, ‘Blockchain: Opportunities and challenges’, can deliver huge efficiency gains and allow treasury departments to work in a more streamlined way. “The result is increased visibility, a reduction of manual tasks, fraud avoidance and better risk oversights through the de-risking of certain transaction types.”

The ACT points out the advantage for clearing instruments such as government bonds and securities in terms of knowing the seller has the asset and the transfer has been made, thus providing heightened security.

Stockmann says that treasurers are more likely to see themselves as customers of blockchain financial systems rather than personally setting up a blockchain system: “Bring us the idea, show us how it works, and we can carry out a risk management and cost/efficiency analysis to see whether we would use it.”

Those ideas are already turning into reality, with Vodafone’s Taylor noting that tangible benefits are emerging from the group’s current proof of concept – a collaboration between treasury and IT services. “We are trying to use it in treasury as a way of managing and centralising our operating companies’ FX.” He explains that the group companies have an internal rate and it removes from the businesses the worry of picking and choosing local rates. They know that group treasury is
administering and standing behind the currency.

At Moneycorp, Haslehurst is equally convinced of the merits of blockchain for financial services, viewing it as an opportunity to integrate more effectively up and down the supply chain, with efficiencies for KYC (know your customer) and reconciliations that Moneycorp undertakes daily with banks and clients. “The days of swapping messages with our banks on an individual, transaction by transaction, and reconciling them must be over,” he says. However, adds Haslehurst, progress and adoption rates depend on different applications and approaches in different companies.

Fintech feasibility
While the place of digital technology in the treasury function is unquestioned, there is more ambivalence towards the appropriate role of fintech firms – something the Euromoney survey highlighted.

For Stockmann, fintech firm offerings are not for all corporates. “Fintechs are coming into the market trying to create simpler, easier, more attractive interfaces for less financially sophisticated customers – retail customers and SMEs. Another use is for gathering data – maybe across more than one bank – so a small client can see it all pooled together,” she says.

Big corporates are doing that through their major banking portal with SWIFT messages in the background, notes Stockmann, and they would be understandably cautious of a fintech solution where staff could be wandering the streets with corporate data on their smartphones or making payments that way.

But with proper controls, fintechs can provide valuable agility. “We used a fintech to provide a trade finance/supply chain financing solution, which focussed on the solution, so the user experience was better,” reflects Vodafone’s Taylor.

He says it is a “neat solution” which the company has adopted and rolled out over the past four years: “There were teething problems you may expect from a smaller start-up company but we’re doing really well, and it is rolling out across our footprint.”

On the other hand, Taylor does say that not every fintech possibility is realised. Vodafone treasury explored a reconciliation tool, which failed to make a sufficiently robust business case. He confirmed that to adopt solutions “you [need to] see a real pot of value somewhere”. Most of the time, they don’t, says Taylor, although he makes the point that fintechs can sometimes fill in gaps left by banks in areas that are outside the banking comfort zone.

Living with change
Treasurers, observed the Euromoney survey, may not have sufficient resources to research a new technology and are “looking for trusted providers to lead the way on services they need”. This means that providers should remain proactive about finding better ways of doing things with their clients where cost/benefit and risk/reward make sense. “Treasury is not isolated from business and technology change. Treasurers can see change coming and will stay up to date and embrace it,” concludes Moneycorp’s Haslehurst.

Peter Williams is a financial journalist and the former editor of the ACT publication The Treasurer

Sources
1 See https://bit.ly/2KQXasw at euromoney.com
2 See https://bit.ly/2H2gPUr at treasurers.org
3 See https://bit.ly/2w9QO22 at youtube.com
One for all

Treasury is ready for a new connected ecosystem, but making it happen needs vision, determination and collaboration from their banking partners, says Michael Spiegel

Understandingly, corporate treasurers are not likely to experiment with new technology when it comes to their core business – their cash management and trade finance flows are too precious. But the treasury voices we heard in the Euromoney research and in the preceding article (‘Proceed with caution’) are at one with the latest research we have conducted in partnership with the Economist Intelligence Unit (EIU) for our 2018 report, *The future is now, how ready is treasury?*

Treasurers are very engaged in the potential of technology to transform their operations and processes. In the EIU research, some 30% of the 300 treasurers globally who responded said they are looking to move in-house systems onto the cloud, for reasons of security, flexibility and collaboration. Around the same number are looking to upgrade treasury management systems (TMS).

Beyond the buzz

While buzzwords such as big data, artificial intelligence (AI) and blockchain are heard all the time, the technology behind them is clearly of interest to this group of corporate respondents. Around 56% of them said that they expected big data to be the most used advancement going forward, and 46% said they would deploy AI for various uses. Only 8% said they were likely to use application programme interfaces (APIs), although this suggests there remains some need for further explanation by banks as to the benefits – in reality, APIs will play a significant role in allowing treasurers to easily access this all-important data. One probable use is in managing supply chains with APIs, improving the treasury function’s access to data through improved communication between systems.

What does all this mean for banks like us? If we want to be more than merely infrastructure providers, we have to work with our competitors and create win-win results for everyone. Our real competitors are the platform providers. While, so far, they have been more focused on the retail side, we may well see more of a platform play in commercial banking and, over time, also in the wholesale banking arena. Therefore, we are teaming up with platform providers and financial technology firms (fintechs) to add more and better value altogether, and thus enhance our existing role at the heart of the new ecosystem.

March of the platforms

Most of the fintechs provide innovative and sound solutions but in narrow fields. Yes, in theory treasurers could replace a transaction bank, but they would need to onboard a multitude of fintechs, or work with a large technology player to cover off the equivalent services. If a provider ended up consolidating all these services onto one platform, it would then resemble and function as a bank, and may get regulated as such.

If a bank did ever get replaced, this would be most likely by a platform and not by individual fintechs. But that is assuming banks don’t evolve at all. At Deutsche Bank, we started a platform approach with our Autobahn app market 10 years ago – and this platform approach will further evolve over time. I don’t think the corporate appetite for replacing banks with fintechs for core treasury solutions is there yet. Another potential factor is the requirement by central banks to have transparency regarding the flow of money for fiscal/monetary policies – which may be more challenging when flows move outside the banking system. Don’t get me wrong, fintechs are important, though banks seem good partners for them to gain the corporates’ trust.

New ecosystem

I am convinced that corporate treasurers will work with a fintech if it is supported by a bank. The EIU research shows that treasurers are prepared to use the technology and services of fintechs in some form with 75% willing to do so if the service came wrapped in a bank recommendation, although, even then, more than half would only do so to a limited extent.

As a bank, we need to on-board the right players, provide connectivity and work with other banks in areas where there is no competitive advantage. This is the ecosystem we need to create. We don’t need to be the first to form the ecosystem – there were plenty of MP3 players before the iPod – but we need to lead from the front and not be relegated to an infrastructure provision function.

In other words, corporates are looking to us, the banks, to design and influence solutions that give them the best experience. And with the help of APIs and the right partners, we can make this happen.

Michael Spiegel is Global Head of Cash Management at Deutsche Bank

Sources

Reflects Paula Roels, Head of Market Infrastructures and Industry Initiatives at Deutsche Bank.

Fast-moving technology has meant that market infrastructures, one of the three core components of the financial system together with markets and institutions, are undergoing a two-pronged metamorphosis with completely new infrastructures being built, along with upgrades to existing ones. These upgrades will lay the foundations for a technologically sophisticated, optimally efficient and resilient industry.

However, the scale of the changes and the resources required to implement all of this means that the entire financial services industry has to move forward as a whole. Christian Westerhaus, Deutsche Bank’s Global Head of Clearing Products, observes that “objectives pursued at a local level, a currency level and a regional level must align with global developments.”

Upgrades

The Eurosystem has the statutory task of, as the European Central Bank (ECB) puts it, “promoting the smooth operation of payment systems”, and it does this to achieve a sound currency, the conduct of monetary policy, the functioning of financial markets, and to support financial stability.

The Eurosystem consists of the ECB and the national central banks of the 19 member states currently part of the Eurozone.

It operates the TARGET2 system, which was updated in 2008 from TARGET, the first-generation system. More than 51,000 banks around the world (and therefore all the customers of these banks) can be reached via TARGET2, which enables central banks and commercial banks to transfer money between each other in real time (see Figure 1 on page 54).

To enable this, banks hold real-time gross settlement (RTGS) accounts with a consistent balance above a minimum...
Objectives pursued at a local level, a currency level and a regional level must align with global developments

Christian Westerhaus, Global Head of Clearing Products, Deutsche Bank

Instant Payments Settlement service (TIPS), scheduled to go live on 30 November 2018, will settle payments for banks and other payment service providers offering real-time payment settlement of SEPA Instant Credit Transfers (SCT Inst), for a mere €0.002 per transaction. TIPS is one of the TARGET services offered by the Eurosystem in an effort to enhance and optimise its financial market infrastructure. “It is about creating an efficient and resilient domestic infrastructure within Europe and for the euro, with smooth transaction functions,” says Marc Bayle de Jessé, Director General, Market Infrastructure and Payments, at the European Central Bank (ECB).

This future-looking attitude is also the motivation behind the RTGS upgrade scheduled for 2021. Logistically speaking, it’s no small task – the entire TARGET2 platform will be down for a weekend, in order to shift the RTGS functions to a simpler transaction flow, streamlining the number of incumbent parties.

Disruption doesn’t have to be disruptive

While TIPS will operate on a 24/7/365 basis, it is not the same for all TARGET Services. TARGET2, the Eurosystem’s RTGS service which has a new release planned for 2021, need only operate in trading hours, although the infrastructure design would in principle also allow for wider operating hours up to 22/7 service. However, the sectors supported by each infrastructure have different service requirements – Bayle says that it’s a case of listening to industry bodies to gauge when enhanced facilities will become useful, before then deploying them.

Deutsche Bank’s Westerhaus, concurs with this approach: “For all-hours functionality, the question to ask is: where do clients have real requirements for it?” He explains that Deutsche Bank addresses time-zone requirements for payments from Europe into Asian markets simply by opening earlier.

The “right” infrastructure upgrades should solve less straightforward problems. For example, infrastructures with slow processing times cannot compete with client expectations for real-time facilities. Infrastructures which are indifferent with respect to supporting compliance procedures will also likely need to be augmented. These upgrades are not designed to make these infrastructures functional. They’re functional already. So, the upgrades and new-build infrastructures that are driven to market will be those that add compelling value.

While the promise of slicker, more robust payments infrastructures is encouraging, it is important to ensure that the strengths of existing infrastructures are not sacrificed in pursuit of upgrades. “Today, we have a network and reach that successfully responds to the needs of our clients when paying or receiving money. Fulfilling these expectations is the foundation that upgrades should be built upon,” notes Westerhaus.

He explains that no matter the value proposition of an upgrade, its implementation should not interfere with the treasury’s day-to-day operations. The trick is “to drive disruptive technologies without actually disrupting clients.”
Financial messaging issues
A crucial element in any market infrastructure will be transparency and standardisation, to ensure that the framework is scalable and resilient. Market infrastructures are the mechanisms that move funds – but messaging standards provide the information that instructs payment. Without the support of a standardised methodology, even the most sophisticated infrastructures will be at risk of having their messages misinterpreted.

Picture this: you are a German corporate paying a new supplier in Spain. Having input the supplier’s account details into your bank’s payment platform, the payment instruction is sent to transfer the funds from the master account. The funds are taken from the account, so you assume that the transaction has been executed. However, the following morning you receive a call from the supplier: the payment did not arrive. Upon troubleshooting, you discover that no input errors were made in adding the supplier to your system – so what happened?

“It is important to remember that the original financial messaging standards were designed in the days when bandwidth and storage were expensive,” says Stephen Lindsay, SWIFT’s Head of Standards. “At that point”, he adds, “the goal was to minimise the amount of data exchanged and to ensure messages were unambiguous and easy for machines to process.”

These semantic barriers can arise from regional differences in terminology, or from individual companies having their own technical jargon. Different words may refer to the same concept, or one word could have multiple meanings. For example, in a direct debit, the payment originator can be referred to as a ‘creditor’ or ‘payee’, while in a credit transfer, the same party can be referred to as a ‘debtor’ or ‘payor’. This is one of the more glaring examples, but it demonstrates how easy it is for financial messages to be misinterpreted and obstruct payments.

ISO 20022: a common repository
Confronted with these messaging standard conflicts, the ECB’s new suite of market infrastructures – including T2, T2S and TIPS – will all run using ISO 20022, an International Standards Organization (ISO) standard for electronic data interchange between financial institutions, as a common messaging standard.

SWIFT began work on ISO 20022 in 2004; a “clean slate” approach to create a single set of international messaging standards that enable users to send consistent, syntax-independent messages. According to SWIFT, ISO 20022 has replaced domestic or legacy formats for payments and securities businesses and has been adopted by market infrastructures in more than 70 countries. It is, notes SWIFT, the principle standard in the instant payments market, implemented in hubs such as Europe, Australia, the US, Canada, Sweden, Denmark and Singapore.

ISO 20022 is unique in the three-layer methodology that supports its messages: preceding message structures have combined the top and middle layers, symptomatic of cost-saving efforts. SWIFT’s pragmatic approach to structuring its logical messages allows for variation in technical language without compromising the terms’ intended meaning.

This has also contributed to ISO 20022’s high-quality data turnover. By relying on granular, reusable data, ISO 20022 catalyses straight-through-processing (STP) rates – meaning users will experience fewer errors, and save time, cost and administrative effort. Clear, thorough data supports sanctions screening, know-your-customer (KYC), anti-money-laundering (AML) and counter-terrorist-financing (CTF) practices.

At the centre of SWIFT’s ISO 20022 development is the need for clarity. “You have to ensure that what goes in at one end of the pipes is what comes out the other end,” says SWIFT’s Lindsay. “To do this, you need common business

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Figure 1: TARGET2 facts 2016–17

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of transactions</td>
<td>87,896,006</td>
<td>89,276,944</td>
</tr>
<tr>
<td>Value (€bn)</td>
<td>445,879</td>
<td>432,781</td>
</tr>
<tr>
<td>Daily average (volume)</td>
<td>342,008</td>
<td>350,106</td>
</tr>
<tr>
<td>Daily average (€bn)</td>
<td>1,735</td>
<td>1,697</td>
</tr>
<tr>
<td>Number of participants</td>
<td>1,076 direct, 701 indirect, 5,072 correspondents</td>
<td>1,073 direct, 684 indirect, 5,114 correspondents</td>
</tr>
</tbody>
</table>

- 99% of TARGET2 payments were processed in less than five minutes each year
- Reduction of transaction values in line with migration of securities related settlement to T2S

Source: European Central Bank

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definitions for the data in each step of the process, even if the technology requires it to be expressed in different formats at different points.”

Especially in cross-border transactions, disparate data semantics can both obstruct payments, and make it incredibly difficult to identify exactly where they are stuck. With clear messaging standards implemented internationally, this problem will be significantly mitigated.

We have already noted that the Eurosystem’s TARGET Services – T2S, TIPS and the renewed TARGET2 – will all be underpinned by ISO 20022, due to what the ECB’s Bayle calls “its universal reach in financial services – adopted globally more and more and across all financial services”. It is also now predicted that the world’s top five currencies will all have migrated to ISO 20022 in the next five years – meaning it will cover 80% of transaction value worldwide. On the back of this momentum, ISO 20022 is developing into the de facto messaging standard for the global transaction banking industry.

**Convincing stakeholders to switch**

To achieve this ubiquity, banks will have to rip and replace old standards – creating the clean slate required to apply ISO 20022. Technology neutral, they are compatible with existing legacy systems. However, for many organisations, existing standards are passably functional. Faced with the costly task of ripping and replacing in order to benefit from ISO 20022, stakeholders may not deem the benefits sufficient enough to balance the migration cost. At a glance, these concerns have substance: a Deloitte study found that corporates adopting ISO 20022 will amortise migration costs in roughly two-and-a-half years – whereas it will take financial institutions more than three times that.

But the same report also found that corporates and financial institutions will likely be shouldering the transition cost equally. Adopting ISO 20022 should therefore be treated as a long-term investment, a vital step towards future-proofing organisations faced with fast-developing technologies and new infrastructures.

Most corporates are already familiar with the standard, owing to its use in enterprise resource planning systems. Any confusion regarding their interpretation can be quickly clarified using the ISO 20022 dictionary, which contains more than 750 business components and 400 business definitions. Since ISO 20022 is based on commodity technology, the transition should be minimally disruptive to client services, bringing many opportunities for better, more consistent business based on scalable, resilient messaging standards.

**Ongoing dialogue**

“Successful market migrations require orchestration and harmonisation across the whole ecosystem,” explains Roels. She adds that benefit realisation following ISO 20022 adoption will require a collaborative approach to implementation, and ample communication to ensure the final result is a fully functional, interoperable service running at optimum capacity.

This has already got off to a good start with industry bodies, financial institutions and their corporate clients including ISO 20022 infrastructure upgrades in their dialogue. In addition, the consultation paper published by SWIFT in April 2018 engages with Bank of England and the Eurosystem and synchronising their respective migrations to ISO 20022. Importantly, SWIFT will offer continuous guidance to adopters and users, complemented by numerous learning materials and a detailed adoption roadmap slated for publication.

“The transformation of infrastructures and market standardisation can only work out if matching goals are being pursued, reflects Westerhaus.” So, while market infrastructures and messaging standardisation are respectively large projects, the successful and harmonised achievement of both will lay solid foundations for a future-proofed, modern industry.

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**Sources**

3. See https://bit.ly/1e1VwjY at bis.org
5. See https://bit.ly/2MNlnoL at pymnts.com
6. See Deutsche Bank’s “The road to real-time treasury” for further explanation of this at https://bit.ly/2MR8N7M at db.com/flow
7. See https://bit.ly/2v99r7z at swift.com
8. See https://bit.ly/2MN8not at pymnts.com

Marc Bayle, Director General, Market Infrastructure and Payment, at the European Central Bank
F
ounded in 1896, Switzerland-based Roche is the world’s largest biotech company, with a mission to search for better ways to prevent, diagnose and treat diseases and make a sustainable contribution to society. In 2017 Roche Group employed about 94,000 people worldwide, and the company is active in more than 100 countries, meaning that Martin Schlageter, Head of Treasury Operations, is a busy man.

"Over the past decade we have consolidated our manifold electronic communication channels with banks into a standardised exchange of message flows via SWIFT. By doing this we have achieved a lot of standardisation, automation and speed for our transaction processing. But cross-border flows were still expensive, slow and lacked transparency," reflects Schlageter.

This clearly needed to be fixed, and failure to do so was simply not an option.

While new entrants continue to disrupt the global payments market, financial institutions have been embracing the SWIFT global payments innovation (SWIFT gpi) initiative as a means to give corporates multi-bank end-to-end payment visibility in real time. flow’s Clarissa Dann provides an update on how legacy infrastructures are evolving to meet a brave new payments world.
for SWIFT and its banking community. McKinsey’s 2017 Global payments report (released in October at Sibos) warned, “Non-banks have stepped up the pace of innovation, and the advent of open banking and development of e-commerce ecosystems stand to fuel significant disruption in the coming years. Financial institutions must rise to the occasion and play a formative rather than reactive role in this transformation.”

Through SWIFT gpi, that is exactly what they have been doing. “SWIFT gpi is not just about fixing some issues around cross-border payments but re-establishing the firm belief that SWIFT is the cornerstone of global connectivity that underpins our overall operational treasury strategy,” says Schlageter.

Bank adoption

Officially live since early 2017, SWIFT gpi uses the existing SWIFT messaging and correspondent banking system, but with a new set of business rules captured in a set of multilateral service level agreements (SLAs) between participating banks. The SWIFT member banks committed to gpi agree to provide “same day use of funds, transparency of fees, end-to-end payments tracking, and unaltered transfer of remittance information”.2

An end-to-end transaction over the SWIFT network typically involves multiple interbank messages exchanged between different parties in the payments chain. As explained in Section Two of Deutsche Bank’s December 2017 SWIFT gpi white paper, Time for action, a new 36-character unique end-to-end transaction reference (UETR) now usefully identifies and tracks the lifecycle of the transaction to which the messages relate,3 allowing for the first time for full transparency of the time it takes payments to travel across the world.

At the time of writing more than 200 global transaction banks had signed up with a capability to channel payments into more than 200 countries. In March 2018, SWIFT gpi already represented 10% of SWIFT’s total cross-border payments in volume, and by June this had climbed to over 25%. More than US$100bn in SWIFT gpi messages are sent every day, enabling payments to be credited to end beneficiaries within minutes – sometimes within seconds.

53% of gpi transactions are settled in less than 30 minutes

gpi Observer Analytics (SWIFT, August 2018)
While this is an encouraging trajectory, SWIFT needs as many banks as possible adopting gpi so that it becomes the new and improved standard for cross-border payments. Javier Orejas, IATA’s Head of Banking EMEA and the Americas, touched on this in the previous edition of flow, saying, “SWIFT gpi is a must for transaction banking service providers to compete against non-banks, as it tackles all the pain points and reduces the related costs around investigations. For corporates, it’s a no-brainer.”

More than 72 of the 200 banks that signed up are now live, 21 of which are in the APAC region. SWIFT’s CEO, Gottfried Leibbrandt, emphasised this at the EBAday Conference in June 2018: “The biggest corridor for payments over SWIFT gpi is between China and the US (nearly 50% of payments are SWIFT gpi), as Chinese banks vie to keep pace with competitors from the e-commerce arena such as WeChat and Alipay.” This is illustrated by the infographic on pages 32–33.

Importantly, 10 of the live gpi banks are Chinese and 17 other Chinese banks have committed to SWIFT gpi and are in the process of going live. These banks represent an estimated 86% of cross-border payment traffic conducted by Chinese banks in mainland China.

SWIFT is not waiting around. In March 2018, following a vote by participating countries, in 2017, it announced that the new UETR introduced for SWIFT gpi will be made a mandatory field in all key payment instructions through the annual standards update in November 2018. Wim Raymaekers, Global Head of Banking and Head of gpi at SWIFT, explains, “It means that in all cases, all payments travelling across the SWIFT network will be tracked, regardless of whether the payments are received by a gpi or non-gpi bank. Though of course a bank that doesn’t join gpi will not be able to take advantage of the additional benefits, like extended tracking and stop and recall.”

Three months later, on 25 June 2018, SWIFT announced that its board – with the agreement of the 10,000 banks that form part of the SWIFT community – had endorsed universal adoption by those banks by the end of 2020. Raymaekers added, “Not only does this underscore our community’s belief in gpi, but it provides us with the green light to accelerate gpi’s adoption as the ‘new norm’ in international payments.”

Market infrastructures
Payment market infrastructures (PMIs) have a vital role to play in ensuring that end-to-end means just that – right down

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**Figure 1: Latest gpi adoption status**

<table>
<thead>
<tr>
<th>Very large community</th>
<th>200+ banks committed to implement, 49 top 50 banks signed</th>
<th>200+ countries covered</th>
<th>80+% SWIFT cross-border payments represented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Millions live payments</td>
<td>72 banks live</td>
<td>600+ country corridors</td>
<td>50+ million payments sent as gpi since go live, 450 thousand payments/day</td>
</tr>
<tr>
<td>Delivering real value</td>
<td>50% of SWIFT gpi payments are credited to end beneficiaries within 30 mins</td>
<td>US$100bn are being sent daily via gpi</td>
<td>Important drop in claim-non-receipt enquiries</td>
</tr>
<tr>
<td></td>
<td>Positive reactions from corporates</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: swift.com/gpi, August 2018
CASH MANAGEMENT: SWIFT GPI

200+ banks committed to implement, 49 top 50 banks signed
80+ countries covered
72% SWIFT cross-border payments represented
600+ country corridors
50+ million payments sent as gpi since go live, 450 thousand payments/day
30%+ cross-border MT103 sent as gpi
50% of SWIFT gpi payments are credited to end beneficiaries within 30 mins
US$100 bn are being sent daily via gpi

Important drop in claim-non-receipt enquiries
Positive reactions from corporates to the last mile. Once the international payment reaches a domestic or regional market, local clearing and settlement can involve the PMIs. Ideally, the PMI’s capabilities allow it to validate the presence, format or content of the gpi elements present in the payment, but if this is not possible it does at least need to be able to pass on the gpi elements and their content to the receiving bank – which is responsible for processing the payment as a gpi transaction if it is a gpi bank.

SWIFT has confirmed that the clearing systems of the most widely used currencies – AUD, CAD, CHF, CNY, EUR, GBP and USD – are already gpi-enabled. As Zhang Xin, General Manager of China’s International Payment Service Corporation (CIPS), confirms, “The global RMB gpi payment is able to enjoy an end-to-end, non-broken payment experience, which in turn increases the global acceptance of RMB as a major payment currency.” SWIFT gpi banks can already exchange gpi payments over the 56 SWIFT-connected market infrastructures, including EURO1 and TARGET2.

Renewed focus on the corporate experience
While the adoption status for banks and market infrastructures is all very positive, very few banks have actually brought the SWIFT gpi capability into their app stores and as yet there is no bank-agnostic central platform for corporates. For example, Deutsche Bank customers can already view the status of a SWIFT gpi payment through the Autobahn app using Cash Inquiry. While this is a game-changer compared to the past, what treasurers really want is a 360°-view of all their payments in a multibank environment via their enterprise resource planning (ERP) system or treasury management system (TMS), and this means banks collaborating to ensure the end customer (the corporates) can have this.

While many banks live with gpi can provide updates through their customer services team, fully automated SWIFT gpi visibility for corporates is nowhere near self-service status. Feedback from Deutsche Bank corporate clients confirms that for SWIFT gpi to deliver their ideal cross-border payments experience, the following four points need to be achieved:
1. Cross-border transactions continue to accelerate and payments are confirmed within minutes and not hours.
2. Extended tracking, i.e. gpi tracking across all cross-border payments

Key facts
SWIFT gpi
1. SWIFT gpi is live, has global reach, and we expect a step-change in traceability of gpi payments (with non-gpi banks) in November, following the standards release
2. Payments have already been accelerated – with international payments now proven to take a matter of minutes, not days
3. SWIFT gpi includes full transparency as part of the SLA between gpi banks. However, corporates are demanding that this transparency and full information on payments is also offered to them through their banks
4. Having a multi-bank solution integrated into their TMS/ERP systems is key for corporates, and is being facilitated through the SWIFT corporate pilot that should show first results by Sibos 2018

Source
Deutsche Bank/SWIFT

Visit us at db.com/flow
Within the SWIFT gpi for corporates pilot, gpi banks have committed to provide a common level of transparency to multi-banked corporates, while leaving room for additional optional information. However, Deutsche Bank will be sharing all information with its corporate clients, and it will remain to be seen whether other banks recognise the importance of providing full transparency to multi-banked corporates. Christof Hofmann, Global Head of Payments and Collection Products at Deutsche Bank, believes that, “this is something that corporates will demand from their banks and may ultimately factor into them moving their business away from banks not providing this transparency”.

Vendors also need time to work with corporates and find the best way of enabling gpi integration with their solutions. “I applaud SWIFT’s approach here as, if we had waited for the vendors to be ready, we would have lost time on this pilot project,” notes Schlageret. Roche and IATA have made small investments into developing their in-house treasury systems so that they can go live in October 2018: “It made sense to find a group of substantial corporates that can do the development in-house and raise interest with the rest of the SWIFT community,” he explains. However, as Hofmann points out, it “depends on the specific demand of each corporate” whether to implement this enhanced solution. Not all corporates do as many cross-border payments as the pilot group participants and those

With a SWIFT gpi for corporates (g4C) pilot group comprising 12 gpi banks and 10 corporates currently underway and due to go live by the end of 2018, this multi-bank solution integrated into a corporate’s ERP or TMS system looks set to become a reality rather than wishful thinking.

The corporates mentioned in the announcement about the pilot on 25 July 2018 included Airbus, Booking.com, Borealis, General Electric, IATA, LVMH Moët Hennessy Louis Vuitton, Microsoft, Ping An Group, Roche, and RTL Group.

Commenting in the release, Lisa Wagner, Head of Capital Management at Microsoft, said: “The ability to access a greater level of payment information in a timely manner through SWIFT gpi will bring immediate benefits to our payments experience, with greater transparency and responsiveness to our vendors. Providing multi-bank information all in one place and in the same format fits into our modern finance roadmap.”

SWIFT gpi includes full transparency on fees as part of the SLA. With respect to their corporate customers, each gpi bank decides on the level of transparency they wish to provide, which can sometimes be frustrating for corporates as, without sight of all bank transaction deducts, the corporate does not get the full picture.

(which will largely be achieved with the November Standards release).

3. The transaction status of cross-border payments is available in real-time across a multi-banked corporate’s ERP or TMS to update payment monitoring dashboards so that time spent chasing payments based on supplier complaints (through incorrect data, payments not received or for the wrong amounts) is minimised.

4. Access to full information on the corporate’s cross-border payments, including execution time, intermediary banks in the payment routing, FX rates, and bank deducts, so the corporate can have a meaningful dialogue with their banking partners.

For this reason a pilot was set up in November 2017 to:
- Standardise gpi flows between banks and corporates.
- Provide a single gpi experience for multi-banked corporates.
- Demonstrate gpi efficiencies in corporate payment processes.

With a SWIFT gpi for corporates (g4C) pilot group comprising 12 gpi banks and 10 corporates currently underway and
unwilling to make this investment can still use their bank portals and customer services to gain benefits from gpi.

The project group has agreed the design and standardisation around corporate-to-bank payment flows, including payment initiation by the corporate using UETRs (as at present corporates cannot generate the identifier) and receiving status updates. Testing is underway and the service is expected to be live later this year (see timeline).

“This is the beginning of the journey, because in the end what is also relevant to us is that even if we are assured the payment is credited somewhere else in the world 30 minutes later, we need to capture that in our accounting system. It is not just about the payments, but the reconciliation,” concludes Schlageter.

The further potential of application programme interfaces to help pick up this baton will keep Martin and all involved busy for some time to come.

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Sources
1 See https://mck.co/2yPYydh at mckinsey.com
2 SWIFT gpi data in this article is from swift.com
3 See https://bit.ly/2KF4yaq at db.com
4 See https://bit.ly/2MunXwk at db.com
5 See https://bit.ly/2nl28EL at swift.com

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SWIFT gpi corporate pilot (g4C) project timeline

Nov 2017  
Launch of pilot with 12 banks and 10 corporates

Feb 2018  
Approval of the agreed solution – design vendors of project member corporates involved

July 2018  
Beginning of testing with closed user group with SWIFT and between banks and corporates

Oct 2018  
Controlled go-live with first production flows between pilot participants

End 2018 - 2019  
Gradual involvement of additional banks, corporates and vendors with a view to go-live outside the closed user group
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Dashboards dynamics

Consumers have had, for some time, the ability to shape service provision and get instant access to information within their personal lives. How do these changing expectations and dynamics impact the securities services environment? flow’s Janet Du Chenne explains how post-trade processes are being transformed by robotic process automation and data analytics.
In today’s fast-moving digital world, consumers are being provided with personalised, data-enriched services and becoming accustomed to having more actionable information when and how they want it. It is only natural that such expectations are being translated into the services they require in their professional lives. As a result, financial institutions are working with their corporate and institutional clients to deliver the same level of service by bringing them closer to their clients’ business needs.

Deutsche Bank’s Securities Services team began this process by unbundling its products into components, providing clients with only the services they require and pioneering new solutions such as the Asset Servicing Only model. With this initial step successfully delivered, the team is now embracing an agile approach to provide deeper insights into service-related data and further enrich the client’s settlement experience.

Embracing a new approach
The Securities Services team has adopted a collaborative and agile delivery approach to ensure focus on projects that deliver benefits to our clients in the near-term. To drive this effort, we have embraced the following three steps:

1. Working closely and collaboratively with the client to understand the real problems encountered in their day-to-day business, as well as by their end users.
2. Identifying a contained problem with the client to solve through focused, small pilot projects rather than a wholesale change that takes longer and may not keep pace with technological change.
3. Bringing together business knowledge and technical specialists across locations to ensure we have the experts working on solving the true problem in the right way.

“...This also means less investment is required, which means we can deliver at least one tangible benefit without the need to ramp up resources,” she says.

This three-step approach has already led to two successful project deliveries in 2018.

• Partnering with a global custodian client to achieve greater efficiency by addressing problems related to trade settlement status, cut-off times and market deadlines; and
• Collaboration between Securities Services and the Deutsche Bank Data Labs in Dublin to build insights into cash liquidity usage, from both a client and an internal treasury perspective.

Improving the efficiency of trade settlement status
In June 2018, a collaborative partnership between Deutsche Bank Securities Services and BNY Mellon was announced. This has resulted in the streamlining of settlement status queries for the Global Custodian’s end clients. End client queries that required conversations between the Global Custodian and Deutsche Bank staff as well as information from multiple systems can now be answered in seconds, providing an enhanced client experience and a more cost-effective process.

At the start of the partnership, Deutsche Bank engaged with the client to achieve a common understanding of their pain points and identify a priority pilot problem: obtaining timely trade settlement status updates for the Hong Kong market.

To tackle this particular problem, Deutsche Bank leveraged Symphony, a widely used, secure, cloud-based financial markets messaging and collaboration platform, and application program interfaces (APIs), to create a chatbot solution (‘Debbie’) that streamlined access to the required information. By integrating this new Deutsche Bank chatbot with the one developed by the Global Custodian, manual intervention into the query process was removed and data from multiple systems was combined into a single response.

In the former process, which can take several minutes:

1. An asset manager calls their global custodian to check their trade settlement status for multiple trades in the Hong Kong market to know if they have been matched.
2. The Global Custodian calls Deutsche Bank, its sub-custodian in the local market, who checks its internal systems and central depository system for the most up-to-date information.
3. Deutsche Bank then responds with the status, either over the phone or by email, which contains a file that shows the required information.
4. The Global Custodian then updates their end client.

This process meant that the end client had to wait for the response, depending on the number of trades in the query.

In the current process, which takes a matter of seconds:

1. The asset manager can ask their trade settlement query within the Symphony platform.
2. The Global Custodian’s chatbot recognises

The insight gained from analysing and condensing large data sets into actionable insights enables effective decision-making and delivers tangible benefit.

Mike Clarke, Product Management, Securities Services at Deutsche Bank
Debbie with the Global Custodian’s chatbot within Symphony. This integration has now replaced previously manual responses for status updates on their securities trades in the Hong Kong market. As a result, the end client now receives a much faster turnaround time to their queries, which is particularly important to help them manage trades near market settlement cut-off time and prevent trade failures that could potentially lead to financial loss or reputational risk.

Providing data insights in Securities Services related cash liquidity
The second project addresses the heightened focus on cash liquidity within the financial services industry. Treasurers need visibility into their company’s cash positions globally to optimise their available liquidity, reduce funding costs and maximise return on cash. Furthermore, financial institutions are having to prove to regulators that they know their available sources of liquidity and have adequate capital reserves in the event of a crisis.

Deutsche Bank’s Securities Services partnered with the bank’s Data Labs to develop a data analytics model on their Enterprise Analytics Platform that graphically shows clients’ cash liquidity usage and how this corresponds to Deutsche Bank’s funding provision in the market. As a result, Securities Services is able to provide more detailed liquidity insights at the client level and review its market funding allocations to ensure they are appropriate to cover these needs.

In an initial 12-week proof of concept, 18 months of cash and securities settlement information for a selection of European markets was brought together, analysed and presented via dashboards to provide insights into client settlement activities that can be viewed by, for example:
- Currency of settlement;
- Place of settlement;
- Time period; and
- Cash account.

Figure 1. Example of support from Deutsche Bank’s chatbot, Debbie
From an internal perspective, managing intraday liquidity is a complex and critical activity for the treasury functions. The output of this proof of concept highlights areas for potential resizing of treasury funding required in the market to support securities settlement and, subsequently, optimise the usage of cash within the organisation.

According to Mike Clarke, Product Management, Securities Services at Deutsche Bank, “The insight gained from analysing and condensing large data sets into actionable insights enables effective decision-making and delivers tangible benefit.”

**What are the next areas of focus?**

Having successfully deployed these two example solutions, the focus now shifts towards widening the scope to cover more markets and clients, as well as address further problem statements through collaborative opportunities.

As an example, settlement efficiency will continue to be a key focus area for data analytics to assist in understanding the impact of the penalty regime of the Central Securities Depository Regulation (CSDR). Under the penalty regime, failing transactions in the market will be subject to fines and a mandatory buy-in introduced after a trade has failed for four days. By providing data insights into patterns in pending or failed transactions, clients will be able to identify the key drivers behind failures and directly address the root cause, avoiding the potential penalty impact.

**The future is now**

While the wider financial services industry continues its exploration of new technologies, these project examples illustrate a collaborative approach to solving problems using data analytics and automation techniques that can help to deliver cost savings and ensure regulatory compliance.

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**Sources**

1 Helpfully explained by Norton Rose Fulbright at https://bit.ly/2x2R1WS at nortonrosefullbright.com
Rich pickings

Getting direct exposure to the top international stocks can be onerous and costly for Australian investors. *flow* speaks to Chi-X Australia’s Vic Jokovic about how innovations in the Australian trading and market framework will allow investors to broaden their horizons.

According to the United Nation’s *World Happiness Report 2018*, Australia is the tenth happiest place on earth.¹ The rankings are based on a number of factors including GDP, social support and freedom.

However, when it comes to Australia’s investment landscape, the joy is somewhat diminished as investors are increasingly looking towards international stocks. There are a number of reasons for this.

Skewed sector mix

The Australian Stock Exchange’s ASX 200 index remains skewed towards a few sectors and does not fully capture the potential of newer technologies and changing consumption patterns that are creating opportunities for investors in the international markets. The index is weighted towards the financials (34%) and materials (17.5%) sectors, with under-representation from ‘new economy’ sectors. Most notably, information technology companies comprise the smallest sector on the ASX 200 and the (Chi-X) CXA 200 Index. Comparatively, the S&P 500 index is more balanced, with no sector representing more than 16% of revenue generation across the index (see Figure 1). The technology-heavy NASDAQ index shows further departure from the ASX 200 sectoral mix.

This point is underlined by Figure 2. The cumulative growth of the MSCI ex Australia companies is more than three times that of the companies represented under the ASX 200 since the post-crisis trough. Global shares are performing better, and Australian investors are principally looking at the big US technology companies (see Figure 3 on page 70).

The significant and growing Australian pension or superannuation pool is another...
reason for this investor base seeking greater diversification. Now the fourth largest in the world (behind the US, Britain and Japan) at A$2.7trn, this pool is growing rapidly and is expected to reach A$9.6trn by 2035 given the mandatory requirement for individuals to pay into a super fund. However, at present, while 31% of the country’s investible pool is held in offshore assets, only 1% is invested in direct international equities.²

While Australian investors are seeking more international investment, there is a staggering high bias to domestic equities in Australia versus other countries, despite Australia representing just 2.8% of the global equity world (MSCI World Index). This over-concentration presents risk and limits an Australian investor’s ability to truly diversify their investment portfolio.

A finite investable universe at home and a superannuation pool that is bursting at the seams is leading these investors to try to find homes outside of Australia to diversify their holdings.

However, they are finding it difficult to access international shares. Direct ownership, particularly of US stocks, has been fraught with challenges. In order to gain meaningful exposure to global growth stories and the new economy, both retail and institutional investors usually need a US-based account and associated services. While many Australian listed companies, exchange traded funds (ETFs) and listed investment companies are delivering underlying offshore assets and exposure in an Australian listed stock, to date no-one has been able to provide direct beneficial ownership of US corporate names.

Alternative exchange approach
After obtaining an Australian financial market operator license in 2011, pioneering stock exchange Chi-X sought to grow in this market with alternative solutions for investors in partnership with other companies. Its name, explains the website,³ is derived from the Greek letter Chi, written X, “symbolising the crossing of the two sides of a trade.” With about 20% of the Australian financial markets daily volumes trading on the securities and derivatives exchange, Chi-X wanted to help more investors gain exposure to the top overseas companies.

Chi-X partnered with Deutsche Bank to work on a solution that would provide direct beneficial ownership of US corporates. Vic Jokovic, a former Deutsche banker who ran a number of businesses including equity derivatives, equity sales and institutional coverage, and latterly headed up the bank’s global markets business in Australia, joined Chi-X Australia as CEO in January 2018 to lead the charge. “As one of the early brokers to execute trades on Chi-X and a banking, FX, rates credit and equities house for close to 30 years, Deutsche Bank was a natural fit for the exchange provider who was thinking about new products for the Australian market,” Jokovic explains.

US market access
The US market was also an obvious place to focus on. “Australian investors are increasingly becoming self-directed and want access to household names like Apple and Facebook,” comments Jokovic. International share ETFs have grown from 16.7% to over 43% of the Australian ETF market over the last five years and 35% of daily ETF volumes are currently traded in Australia occur on Chi-X.

Chi-X could also leverage Deutsche Bank’s experience as the first bank to issue transferable custody receipts (TCRs) over US shares in Argentina, Mexico and Chile, beginning in the late 1990s. This allowed...
TCR investors in these markets to invest in the underlying shares of US companies on their home market’s stock exchange.

Together, Deutsche Bank and Chi-X identified a number of pain points for Australian investors and brokers, who faced a clunky process, with significant operational issues, to obtain direct access to US companies. “There are extensive forms and long set-up times for accounts, with some brokers telling us it can take eight to 12 weeks to set up a new account to access shares globally,” recounts Jokovic.

The two companies developed a solution using transferable custody receipts that would simplify the process of buying US names locally in the Australian market on Chi-X from 10am to 4pm local hours, as opposed to overnight. The partnership would see Chi-X responsible for the new market framework, including trading and the new TraCRs web site, while Deutsche Bank would issue and service the transferable receipts, leveraging its deep experience as a global depositary bank.

Essentially these transferable custody receipts, or TraCRs (see box-out), reflect the beneficial interest in a US share, with settlement happening during the same cycle as normal Australian shares. Investors will also have the ability to convert their TraCRs into the underlying US share as long as they have a US-based account.

Brian Studdert, Head of Depositary Receipt services, Deutsche Bank expects TraCRs to bring “the benefit of global diversification to Australian investors, by providing a simple and convenient way of investing in leading US companies such as Microsoft and General Electric during the Australian trading day.”

Meeting regulatory expectations Jokovic recalls the regulatory approvals that were needed from the Australian Securities & Investment Commission (ASIC), the local securities regulator. “I was at that first meeting along with Jeff Margolick, the Head of Strategic Solutions for Depositary

With Australian investors increasingly seeking international diversification in their portfolios, we have partnered with key market participants and have developed an innovative market infrastructure to bring an efficient solution for these investors

Jose Sicilia,
Head of Trust and Agency Services, Deutsche Bank
How TraCRs work

ASIC classifies TraCRs as Australian equity market products. By holding a TraCR, an investor gets the beneficial interest in a US share, which is ultimately held by a US custodian bank. This means that TraCR investors gain exposure to the financial performance of that share, including the right to receive dividends in Australian dollars, and to exercise voting rights.

TraCRs are purchased and sold through an investor’s local broker in Australian dollars during local trading hours, which can be more cost-effective than investing directly into shares in the US.-clearing and settlement takes place in Australia’s Clearing House Electronic Subregister System (CHESS), and investors can see their holdings right alongside their other Australian domestic securities investments.

Challenges of Direct Overseas Investment

Direct share investment in the US has historically proven challenging for Australians. Investors require US accounts capable of holding the shares, and given the time zone difference, may have trades executed at unknown prices during the Australian night time. Additionally, direct investment has meant higher brokerage fees than for domestic shares, and foreign exchange conversion costs. In some cases, investors also bear US custody costs.

TraCRs solve these challenges, as they trade on the Chi-X exchange during local market hours in Australian dollars. Market makers will help provide quotes with the expectation that natural liquidity will form on both sides over time. TraCR investors will also benefit from wholesale foreign exchange rates via Deutsche Bank’s foreign exchange platform. Since TraCRs are held domestically, there is no US account requirement, nor associated US custody costs.

Simply put, investors can trade TraCRs in the same way as they would invest in listed shares of Australian companies.

Simplified process
With the new solution, the process is simplified because the local broker who receives the order will simply send the order through and execute it on Chi-X.

Sheridan Thompson, Head of Strategic Development at Commonwealth Securities, an online stockbroker that invests in overseas companies, says, “We have been supportive since first hearing about the product over two years ago because of the potential benefit for our customers. The product launch is a concrete example of the benefit of competition in the Australian market and a tribute to the perseverance of the issuer, Deutsche Bank, and Chi-X in meeting regulatory scrutiny of a new-to-Australia product.”

Thompson described the process of investing in overseas listed companies as “difficult and expensive for our customers”. To invest, the customers are required to open a separate account, move money to a foreign currency account, place orders to trade overnight and most submit a US W8-BEN tax form. He adds, “Brokerage rates, including our own, are typically higher on international accounts than on domestic accounts. Partly because of these barriers, our customers’ investments are not as well diversified geographically as they could be, despite the relative maturity of the Australian market.”

With a TraCR they will not need to open a new account, will not need to convert funds to a foreign currency, and will be able to trade in real time with live prices at the domestic brokerage rate rather than a higher rate. This, says Thompson, “is a much better customer experience”. He hopes that more of them will take advantage of the opportunity to diversify their investments as a result.

Sources:
1 See worldhappiness.report
2 See https://bit.ly/2MueWTu at ato.gov.au
3 See chi-x.com.au
Over the past decade, emerging technology, changing client behaviour and market demand have seen banks put open APIs and cloud technology at the heart of their overall business strategies. But is regulation holding back or driving innovation in this space? Polina Evstifeeva investigates.
how the European Commission gave banks their initial push towards the new platform economy, in the form of open banking driven by Payment Services Directive 2 (PSD2). From September 2019, banks must open up their data and systems to third parties – whether other banks or fintech firms – and they will do so using application programming interfaces (APIs).

Whether banks build this new API ecosystem in the cloud – leveraging its ability to collaborate and deploy remotely in real-time – remains to be seen. Regardless, the potential of cloud technology to transform more broadly is significant, providing the on-demand and flexible computation power, storage and advanced tools necessary to underpin banking innovation. Indeed, many see the cloud – public, private or a hybrid – as the building block for innovation around API, distributed ledger technology (DLT) and artificial intelligence (AI) – all of which require computing power and capacity beyond the infrastructure of most banks.

An unexpected journey…

Industry practitioners seem to agree they are currently on a journey, the object of which, says John Gibbons, Head of Global Transaction Banking at Deutsche Bank, is “to provide an easy-to-use, seamless customer experience, with new digital services offered across a broad number of touchpoints”. The need for this”, he continues, “has never been greater.” But this is a marathon, not a sprint. To ensure that open banking solutions are tested properly, secure and built for purpose, it is essential to start with baby steps, “first crawling, then walking, and finally running”, according to Thomas Nielsen, Deutsche Bank’s GTB Chief Digital Officer. This is a journey, he says, that will “require the embrace of new technologies and IT infrastructures, the establishment of defined rules on how data is governed and made secure – especially cross-border – and cultural change”.

At EBADay 2018 Claus Richter, Head of Cash Management Customer Solutions at Nordea, explained how he divides this journey into four key stages (exponents of stages 2–4 are shown in parenthesis):

1. Regulatory compliance.
2. Opening up bank platforms to competitors and their products (Netflix).
and functionality around it – leveraging the APIs exposed by the iOS platform.

Many fintech firms in the transaction banking space are doing exactly this – developing applications for processes from credit scoring to risk management to Know-Your-Customer (KYC). Yet Nielsen describes how “for them to really add value, they need to be able to integrate into core banking infrastructure.” APIs – with the appropriate security standards around authentication, entitlement, and data transfers in place – have the potential to transform customer experience and business processes in equal measure.

Cloud confidence
Cloud computing has been one of the most disruptive forces in the technology industry over the past decade – driving down costs, generating flexibility and, crucially, providing the building blocks for innovation and collaboration. At the same time, public clouds and multi-cloud environments have allowed customers to choose their optimum combination of providers and services.

The key to realising this potential in banking (where comfort zones gravitate towards the bespoke security and governance designed into private clouds), is an enabling and responsible regulatory treatment of these technologies. However, the US Treasury Report Nonbank financials, fintech and innovation makes the point, “Financial services firms face several regulatory challenges related to the adoption of cloud, driven in large part by a regulatory regime that has yet to be sufficiently modernized to accommodate cloud and other innovative technologies.”

On 3 July 2018, the European Banking Authority (EBA) concurred with this perspective in a report on “the impact of fintech on incumbent credit institutions’ business models”. It observed that while many banks have already altered existing processes to account for technology such as mobile banking and biometrics, they were still in the “exploratory stage” of implementing the “second wave” of technologies comprising cloud, big data, AI and DLT.

Exploration is rarely without risk, and the cloud is no different. Harnessing its potential requires solutions to concerns around data protection and location, security issues and concentration risks.

While technology and public perception have both moved on, the outdated belief that systems and data can only

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3. All parties leveraging and monetising each other’s data and products (YouTube).
4. Creating an ecosystem value chain that moves beyond just offering traditional banking products (Amazon).

As with any major industry change, each stage should ideally be further supported by regulation where gaps or asymmetries are identified in the regulatory framework, to ensure that corporates, banks and fintech firms can all compete on a level playing field in a transformed financial services ecosystem.

The potential of APIs
There is no doubt that open APIs hold great potential for both corporates and their banks. Many corporates are already eyeing up the opportunities they will have to reduce payment costs, increase security, and speed up settlements. They will have the chance to automate large parts of their banking, integrating it directly into their workflows (see Figure 1), while banks and fintech firms will enjoy enhanced opportunities to develop new products and services.

For banks, once they are sufficiently API-enabled, the next question is whether to develop new solutions in-house using those APIs or partner with fintech firms as and when required to build end-to-end solutions. The Apple app store iTunes model is a clear example of where banking could go – while Apple provides the core platform (iPhone and iOS), it also enables developers to create a new ecosystem of applications

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Figure 1: Integrated use of APIs

Source: Deutsche Bank
be secured close-to-hand in the form of certain regulatory restrictions on data location and replication. In fact, restricting data storage to a single location increases security risks and costs, leaving it vulnerable to natural disaster, intrusion and surveillance. The Information Technology and Innovation Foundation notes that “dozens of countries have erected barriers to cross-border data flows”.8

While the EC proposal on the free flow of non-personal data9 relating also to cloud services is a step in the right direction, many issues still remain. There is clearly some way to go in the greater harmonisation of EU regulation and local implementation.

Data access
Data location restrictions are not the only hurdle on this four-stage journey (see above). In its final report and recommendations on outsourcing to cloud services providers10 the EBA requires financial institutions not just to know where their data is physically, but also to be able to access and audit it. This would not only mean cloud service providers (CSPs) disclosing where their data is located but also inviting access. Such broad and unrestricted access introduces potential security risk to the CSP and the outsourcing institutions (and outsourced data), and thus could work against the original objective of the regulation.

“Respondents also indicated that the added value of access to physical locations was rather low in cloud technology environments, where data is physically and geographically dispersed across many systems, data centres and countries,” says the EBA report. It continues, “Logical access to the data and a virtual audit of data would be much more relevant to ensure that the appropriate controls were in place.”

Given a CSP has many clients, compliance with regulatory requirements to maintain physical access audit rights might be a challenge – how would a CSP support broad rights of access and audit in practice for thousands or millions of their clients? At the very least, differing interpretations of these regulations can complicate and slow negotiations between banks and CSPs.

The EBA recommendations on cloud outsourcing (28 March 2018)11 recognises alternative ways for financial institutions to provide acceptable levels of assurance, by using pooled audits or third-party certification. While these are welcome, another solution would be the wider use of industry certifications, such as ISO, as an alternative to direct oversight. Such certifications would ensure a proper level of oversight and due diligence by the CSP over its subcontractors, and allow cloud users to demonstrate compliance by using only providers with certified supply chain governance practices.

Interoperable technical standards
The Berlin Group, a European Standards Initiative with 45 members from more than 22 countries, recognises that a minimum level of API standardisation is going to be essential to bring about wholesale change and buy in. According to their website, its NextGenPSD2 Framework Version 1.0 “offers a modern, open, harmonised and interoperable set of APIs as the safest and most efficient way to provide data securely”.12

For these standardisation efforts to progress, Shahrokh Moinian, Global Head of Cash Products, Cash Management, at Deutsche Bank stresses that “market participants should co-operate, adopt best practice and align themselves with developing common global standards.” For banks, this “goes far beyond mere regulatory compliance.” He notes that the greater the efforts market participants make now to get up to speed on open API development and stay abreast of evolving global standards, the more open, competitive and efficient the global market for API-facilitated services will become.

To safeguard against fraud and keep data safe, banks must also be able to verify that third parties accessing their customer data, or initiating payments, are authorised. A good way of doing this is a reliable central register, listing all licensed third-party providers (TPPs) across all member states. EBA clearing subsidiary PRETA’s Open Banking Europe is building just a central, standardised repository of TPPs’ contact information for banks, and banks’ operational information for TPPs, collated from local competent authorities – although it is not yet clear whether it will cover all EU jurisdictions. Where no regulatory confirmation of third party identities and credentials is available in real time, another independent and reliable source is needed. One thing is clear: to ensure certainty, any such register must record and be updated in real time.

New order
Regulation may encourage or inhibit the industry’s current journey. “Ultimately, we need to ensure that the current and future legislative frameworks are adapted to the digital reality,” comments Noémie Papp, Head of Digital & Retail at the European Banking Federation (based in Brussels and Frankfurt). But, she underlines, regulatory bodies should take their cue from technology, and allow new business models to develop, rather than prescribing how individual technologies should be used.

It is a delicate balance.

Polina Evstifeeva is Head of Regulatory Strategy at Deutsche Bank’s GTB Chief Digital Office

Sources
5. Observations made at EBAday, June 2018. See https://bit.ly/2wnMNHk at db.com
12. See https://bit.ly/2NgMwo at berlin-group.org
The only way to make the most of what technology transformation can do is to rethink transactional processes from scratch rather than trying to convert analogue processes to digital ones, says Simon Taylor.

Taking a paper document, whether a bill of lading or a letter of credit, converting it to a PDF, then emailing it, or using a mobile app to do so, isn’t being truly digital.

OK, it is digitalising processes. But to what end? None of the data exhaust is available, none of the workflow information is real-time and, in truth, the user gets none of the benefits of a digital environment. What is born digital is fundamentally different from what is born analogue and has subsequently been digitalised. When we “digitalise banking”, we therefore create a service gap between what the customer needs and what is actually provided. It’s a gap that challenger banks, fintechs and tech companies exploit with relish.

So, let’s forget about digitalising banking once and for all.

Truly digital banking is only 1% finished. Some may view this as bank-bashing; but it’s not. Rather, it is a statement of opportunity: with new technology and emerging customer expectations. I think we’ve only begun to scratch the surface of what’s possible.

Thoughtful innovation

So what do I mean by digital? Digital is understanding customer journeys and their end-to-end needs. It is then re-imagining what the banking provision should be, given these needs and the availability of new technological solutions.

For instance, corporates need information on their cash flow position, when their payments will land and how much these payments are going to cost them. In trade finance, they need information on when their goods have left, and when they may arrive. Is a paper statement or document the best way of meeting these needs? Of course not. What about if I just make an electronic version? No.

Take a step back. Starting afresh, you would construct the process again, redesign products around clients’ desired outcomes and end-to-end journeys and be vastly more competitive. In trade finance, this means dematerialising trade documents and looking at workflows all the way along the transaction journey. I see the we.trade platform as a step in the right direction here, although even that is not perfect.

Banks – and more or less all other businesses, for that matter – need to start forming teams around customer jobs to be done rather than product creation. It may sound counter-intuitive at first, but by identifying the problem and pain point and finding an excellent solution to it, big businesses create a minimum loveable product (MLP) — similar to a minimum viable product but much better because customers are involved in the product and intimately connected to its utility.

Fintechs are the best proponents of MLP development. Think of Transferwise’s multi-currency account, which allows SMEs to have one account that serves many needs in an easy-to-use way. It meets their needs as straightforwardly as possible, and that’s the goal of truly digital banking.

Small teams, with entrepreneurial spirit, are vital to the success of digital banking. Banks should take the 5–10% of budget they spend on innovation and create “red teams” that are charged with doing something truly inspirational to create that MLP for clients. They should focus not on the breadth and depth of banking services a global bank may offer, but rather on solving clients’ problems (with live solutions, we need to get past proofs of concept), even if this is only for a handful of clients.

Navigating the battlefield

Who stands to win the race to become truly digital? There is certainly no shortage of candidates: incumbent banks are being attacked from all sides by new challengers and digital non-bank service providers. This battlefield is actually filled with micro battles, all of which are shaping the future of our industry.

The winners will be not only those that have the greatest number of customers, but also the most intelligent digital service.
Right now, I do not see any clear front runners in the digital banking battlefield. Incumbent banks have the customers, but they need the tech, new challengers have the tech but not the customers, and the big tech companies and platforms seemingly have everything, apart from the underlying financial service provision (at least for now).

I do understand that banks have to sustain regulatory compliance, safety and soundness, as well as meeting the short-term needs of shareholders – and keep the lights on.

This leads to the behaviour we see now. Billions are invested in “digital transformation”, which at best results in incremental improvements to maintain market relevance.

But if banks continue relying on their legacy technology and culture within the changing banking landscape, they will be punished. The big tech giants are also getting ever closer to announcing their invasion into the market; they have the tech, the customers and the money to make seismic shifts. They won’t just copy the traditional banking model, they’ll be doing something brand new – something that will disrupt market dynamics for good. Banks can’t afford to sit back and wait for this to happen.

Stand out from the crowd

If you want to truly stand out from the crowd in financial services, then seeing the world as commoditised products pushed through market channels may be what’s holding you back. The future is intelligent digital services.

It’s about building real-time, intelligent, contextual services that are human and extendable – and that solve a clear problem for a customer who is underserved and overcharged. This is how you differentiate, this is how you move forwards on digital.

So let’s forget about “digitisation” or “digitalisation” and get digital. We are only 1% of the way there.

*Simon Taylor is Co-Founder and Blockchain Lead at 11:FS*

Sources
1 https://we-trade.com/the-platform
Music to all ears

How did six disadvantaged children end up playing concerts in Boston as members of the Metropolitan Youth Orchestra of Hong Kong? Neil Jensen finds out how the Deutsche Bank youth engagement programme is changing lives.

In many ways, music underscores life itself, helps people overcome adversity, celebrate a special occasion or acts as an outlet for creativity. It is no coincidence that major events are invariably accompanied by music in some shape or form – as are significant family occasions and celebrations in communities all over the world.

Deutsche Bank’s Born to Be – Dream Beyond concerts in Asia recognise the value and power of music as a force for good and a way for people to realise some of their potential, even in the most difficult of circumstances. In the region, the bank has worked with a number of organisations to give young people facing significant hurdles a chance to grow, achieve and develop as people through music.

Dancing in the street
Deutsche Bank has a vibrant Corporate Social Responsibility (CSR) operation within Asia and as Annie Yeo, Head of CSR for the region, explains, there is no shortage of people willing to help others. “In Asia Pacific, we have a strong volunteering culture and this creates infectious enthusiasm for our various projects. It is not uncommon for young people wanting to join the bank to ask about our CSR programmes – they genuinely want to work for a company that has a soul,” she says.

This enthusiasm has been matched by the bank’s appetite for putting muscle into some innovative programmes. “Asia has a lot of urban deprivation and this includes children who live on the street and have very uncertain futures. We discovered that music was something that could break barriers, help them realise untapped potential and provide a distraction from their everyday lives, which for some of them, is a dangerous existence,” reflects Yeo. She adds, “Music was also one way that the children in the Philippines, for example, came together after they had been roaming the streets. In 2009, our Rock Ed initiative was started by Deutsche Bank volunteers to coach street children in playing rock music.”

Deutsche Bank linked up with the singer Joss Stone, who was in the Philippines for a music festival and wanted to be an inspiration to disadvantaged music students. “Joss worked with us and came to our office, teaching the Rock Ed kids and also bringing along her band members to show them how to play musical instruments better,” says Yeo. Stone said she felt “inspired” by what she had seen, with the children clearly enjoying the experience.

Strings to the bow
The Born to Be music programme has produced some genuinely heart-warming stories, such as the tale of Stephanie Ow, a blind musician in Singapore who was abandoned by her parents as a child and brought up by her uncle and aunt. She was encouraged to learn the two-stringed traditional Chinese instrument, the erhu, by her uncle. Deutsche Bank sponsors her music scholarship at a university and additional training with the Singapore Chinese Orchestra. Her music skills have gone from strength to strength. As she is unable to read scores, she has to memorise everything. Stephanie’s philosophy is simple and extremely motivational for anyone facing major obstacles, “Music knows no barriers... and challenges are things that shape us.”

Since 2016, Deutsche Bank has been the main sponsor of the Hong Kong-based Metropolitan Youth Orchestra’s (MYO) concerts. The orchestra is one of the pre-eminent youth orchestras in Asia and was founded in 2003. It has around 300 musicians in its ranks and one of its specialities is “flash mob” performances. Through Born to Be, the bank partnered...
with MYO to provide music scholarships to promising young people (under 24 years old) with disadvantaged backgrounds or special needs requirements. The programme is reviewed on an annual basis, so the scholars have to apply for their place each year. The scholarships include weekly training with the MYO, as well as a place on a summer tour and the chance to appear centre stage in Deutsche Bank’s Dream Beyond concerts.

For the past three years, Deutsche Bank has been supporting the music scholarship of the Pang twins, Yuk Lam and Yuk Shing, who both have autism. These two young violinists are overcoming their personal difficulties, thanks to the pleasure and sense of achievement they get from their music.

It’s easy if you try
Both Yuk Lam and Yuk Shing say that music has provided meaning and direction for them. “If there was no music in my life, it would be like putting in so much effort and having nothing in return,” says Yuk Lam, whose musical tastes range from Mozart to the pop group K-391. Yuk Shing also likes classical and pop, but turns to John Lennon’s Imagine whenever he encounters difficulties, “It gives me confidence and cheers me up.”

There is little doubt that the programme has transformed their lives. “It has helped me to manage my time well and it has also meant we have the opportunity to join a music tour overseas – prior to that, we had never travelled outside of Hong Kong,” says Yuk Shing. His brother adds, “I am very thankful to have this scholarship. Although we have autism, we are treated exactly the same as any other member of the orchestra.”

The twins joined four other scholars on an 11-day tour to Boston and New York this year. All of these young musicians appeared in the bank’s inaugural Dream Beyond concert in Hong Kong in April 2018 to mark Deutsche Bank’s 60th anniversary in one of Asia’s financial hubs. These concerts, which have been running in Singapore for the past five years, are free for the bank’s charity partners, staff and clients to attend. Staff also take part in the event, on stage and behind the scenes.

Playing with accomplished musicians is also a big inspiration for the twins. Yuk Lam and Yuk Shing performed with the one-armed Canadian violinist Adrian Anantawan in 2017, which Yuk Shing described as a “wonderful experience”. The reaction of the audience also provides a major boost to their confidence, which grows as they become more and more proficient with their violins and their success continues. The twins’ mother, Elaine, says, “Playing in the orchestra has made my boys more confident when it comes to communicating with people.” She adds, “Thanks to the scholarship, I see many opportunities for them in the future and that makes my heart soar.”

Music knows no barriers… and challenges are things that shape us

Stephanie Ow, erhu soloist

In tune
Annie Yeo finds the programme a source of great encouragement. “To see children who have learning difficulties performing on a grand stage in front of a large audience, knowing how difficult it must be for them, is incredibly moving. Moreover, the way our colleagues support and play a part in helping these kids is very gratifying. It really is one of those projects that makes me feel I have the best job in the world.”

Neil Jensen is a freelance financial journalist and a former co-Editor of flow

Sources
1 Hear for yourself on YouTube at https://bit.ly/2PTKQvd
2 Her story was featured in Singapore’s Straits Times in 2016. See https://bit.ly/2orYVDC
3 Details of eligibility for the Deutsche Bank Scholarship Programme can be found at https://bit.ly/2MbOmPi at db.com
SWIFT change

Stephen Gilderdale, SWIFT’s Chief Platform Officer, explains how the co-operative is using new technologies to enable faster international payments and help improve the industry’s cybersecurity

SWIFT is unrecognisable from a decade ago. Back then we ran a financial messaging service delivering on industry-wide expectations on confidentiality, integrity and availability. As technologies have evolved, and the wider operating environment has changed, our customers and their customers have changed, and so we too have changed. Customers still expect SWIFT to deliver as a trusted platform, but now they expect much, much more.

In the cross-border space we are enabling our customers to perform faster, safer transfers; domestically we are building instant payment capabilities; and alongside this we are innovating fast, introducing new tools and capabilities to assist them – whether in scanning for fraud, detecting AML or CTF abuse, or in helping protect them against cyber-attacks. This expansion has necessitated decisive internal change and the adoption of a swathe of new technologies.

Platform power
I have to ensure our core platform does more than just deliver on the principles and values we have been known for throughout the decades; it also has to be interactive, flexible and scalable. Not only that, but I have to ensure that what we develop – or co-develop – really works for all our community. The complexity in this lies in the plurality of our customer base – no longer just traditional financial institutions, but also corporates and fintechs. And beyond that, we also have to look at our customers’ customers.

In addressing these demands, our focus has to be as much on the way we deliver our products and services, as on what those products and services are; using the best technologies for each purpose to ensure we can deploy them how and when our customers want them. Using combinations of cloud, API, microservices and containerisation technologies we are able to develop much more accessible “simpler” solutions; furthermore, through iterative and agile development processes we are able to do so faster and better than before.

Transforming payments
Nowhere is there so much change and opportunity as there is in payments. Safety, competition and speed, however, remain the watchwords. Safety, because technology (particularly networked technology) introduces cyber risk; competition, because technology can enable it (or, albeit unintentionally, preclude it); and speed because customers, and our customers’ customers expect it. SWIFT is delivering on all three fronts.

Safety in payments is paramount. While we continue to focus first and foremost on our own security, our Customer Security Programme (CSP) is designed to help our customers defend, detect and respond to cyber-attacks. The CSP includes a Security Controls Framework to give counterparties a level of confidence and transparency when doing business with each other, and an Information Sharing and Analysis Centre through which we share the very latest threat intelligence.

Competition is vital for any industry, and the payments sector is no exception. While competition should most directly benefit the consumers of any given product or services – it also benefits providers, by making them better! In the last several years developments in technology have attracted new contenders to enter the payments area, resulting in a vast amount of innovation. It has been very rewarding to be involved in this, but to ensure this competition works and remains sustainable, we now all need to ensure access, interoperability and standardisation across the piece. This is why we are working hard to enable the adoption of global standards like ISO 20022 and working to standardise APIs. These developments are absolutely fundamental to ensuring we have a vibrant, efficient, accessible payments ecosystem in the future.

Speed – and certainty – of payment is key. SWIFT has moved fast to dramatically speed up international payments through the global payments innovation (SWIFT gpi) initiative, which is already enabling hundreds of billions of cross-border payments within minutes, many even within seconds. In the domestic space we are not standing still either – delivering and offering connectivity to instant payments solutions around the world. And in short order we hope to connect these domestic systems through the gpi rails, to offer a near instant cross border payments experience.

Our message is straightforward: SWIFT is building upon its strong track record of integrity, safety and reliability, while dramatically speeding up payments and reducing complexity. We are acting in unison with our community to tackle the cyber threat and are embracing new technology to deliver the capabilities our customers want.

Stephen Gilderdale is Chief Platform Officer at SWIFT